

**ANALYSIS OF INCOME DISTRIBUTION BY CASTE  
AND FARM SIZE FOR A PANCHAYAT  
(VILLAGE SYSTEM) IN THE TARAI  
REGION OF NEPAL BY MEANS  
OF A SOCIAL ACCOUNTING  
MATRIX**

**By**

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in partial fulfillment of  
the requirements for  
the Degree of  
DOCTOR OF PHILOSOPHY  
May, 1991**

Thesis  
1991D  
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## ACKNOWLEDGEMENTS

Many people were involved in the completion of this study. I am obliged to all of them and would like to extend my sincere thanks. First of all, I thank my advisor, Dr. Dean F. Schreiner, for his encouragement, guidance and assistance. I appreciate and thank the members of my advisory committee, Dr. James E. Osborn, Dr. James Trapp and Dr. Michael Applegate, for their valuable criticisms, suggestions, and recommendations in the preparation of the final draft. I thank Dr. Art Stoecker for his valuable comments and suggestions.

I sincerely thank the Rotary International for sponsoring my study. I am also thankful to the Department of Agricultural Economics, Oklahoma State University, and Dr. L. F. Miller for providing me with an assistantship and the 'Dr. L. F. Miller Award.'

I sincerely thank Mr. T. Manekshaw, Dr. Yogendra Jha and others of Kathmandu Rotary Club; Mr. K. K. Navada, his associates and Mr. Kamal Seth of Rotary District 329; Su Anne Schreiner, Barbara Brenholts, Bernice Kaufman, Rachel Heuman, Margret Cronmiller, Abigail Raymond, and Jacqueline Stecki of the Rotary International headquarters, for their encouragement and logistic support during my study period.

I am highly thankful to Dr. James E. Osborn, my Rotarian Counselor, and his wife Mary Ann for their counseling and encouragement.

Sincere thanks are also due to Dr. Raleigh E. Jobes, and his wife, Betty Jo, Don C. Peters, Lee Alan Laslie and all the Rotarians, within the country and abroad, who were a source of inspiration to me.



I express my sincere thanks to the Agricultural Development Bank of Nepal for providing administrative and logistic support. Special thanks are due to Mr. Shree Krishna Upadhyay, Chairman-cum-General Manager of the ADB/N, for his precious suggestions and encouragement.

I thank all the faculty and staff of the Agricultural Economics, Statistics, and Economics Departments at Oklahoma State University for their services. I appreciate the assistance of Dr. Elton Li, Priscilla Milam, Brent Tweeten, Min-Fah, and David Cassel during computer work.

Thanks are due to all farmers of Kumroj Panchayat (my study area) for sharing their precious experiences with me during the survey period. I also thank Mr. Rudra Bhattra and Ganesh Pandey for their help during data collection and organization. Cooperation and logistic support provided by the Small Farmers Development Project, Kumroj are highly appreciated. I thank Mr. Namdev Neupane, the project chief, and his associates Arjun, Shanta, Bimal and Ram Bahadur. I further extend my sincere thanks to Mr. Dil B. Basnet, Mr. Ganesh Baniya, Mrs Meera Koirala, Mr. Pramesh Kumar, Mr. Ramkumar Shrestha, Mr. Nirmal M. Pradhan, Dr. Krishna Shrestha, Mr. Binay Rawal, Mr. P. C. Chaurasiya, Mr. Prem Tiwari, Mr. Deependra Kshetry and staff of various level offices of Agricultural Development Bank, Nepal Bank Limited, Rastriya Baniya Bank, Nepal Rastra Bank, CARE/Nepal, Agricultural Development Office (Bharatpur), Cooperative offices (Parsa and Bachhayauli), Nepal Malaria Eradication Office (Ratna Nagar), Veterinary Office (Parsa), Village Panchayat Office (Kumroj), Teachers of various schools (Kumroj), and members of various community level committee (Kumroj) for their assistance to me during data collection.

Thanks are due to Virginia Banks and all others at the Office of International Programs (OSU), Elaine Burgess, Kyle Blake and all others at the International Student Services Office (OSU) for their administrative support.

Thanks are also due to Mr. Shekhar Bahadur Pradhan, Mr. Gyanendra Raj Koirala, Mr. Vinod Bhattra, Mr. Rudra P. Dahal, Dr. David Edds, Tracy Edds, Tamara Walkingstick (Usha), Chuda Basnet, Vidya Basnet, Dr. P. M. Agrawal, Dr. Michael B. Wallace, Mr. Mahanth Prasad Sah, Mr. Mahendra Singh, Mr. Ramadhar Singh, Mr. Yogendra Prasad Raut, Mr. Kusheshwar Mahato, Mr. Ram Chandra Gupta, Mr. Jitendra Thakur, Pushpa, Shailu, Mr. Koh Young-Kon, Mr. Shah Salam and all friends/relatives for their help, encouragement, and moral support.

Mr. Lalit Chandra Pradhan (Posthumus), Mr. Shambhulal Shrestha, Mr. Motilal P. Gupta, Mr. Jibachh Lal Das (Posthumus), Mr. Ramji Singh, Mr. Gopal P. Shrestha, Dr. Shao-er Ong (Posthumus), Mr. Madhav Karki, Mr. Satya Narayan Yadav, Dr. T. Lakshamanan, and Mr. Trilok Neupane are special persons whom I would like to thank for their contribution to my academic and spiritual life that helped me to complete this study.

I thank my parents Shri Tulasi Sah and Tetari Devi for their blessings and inspirations.

Special thanks are due to Ram Sharma, Ram Mishra, Hiralal, Bharatlal, Laxmi Narayan and Rup Narayan for providing encouragement and moral support to me to pursue my Ph.D.

I cordially thank my wife Sheela and daughters Sangeeta, Ambika, and Anu for their endurance and affection during my study period.

Last, but not least, I thank Gloria Cook for her high speed, excellent typing of the preliminary draft and final copy of this dissertation.

Finally, I dedicate this dissertation to my elder brother Narsingh Prasad, who sacrificed his own bright academic career in his teens so that the rest of our family might receive an education.

Without the moral support, encouragement, and advice of each of these people, my Ph.D. achievement would not have been possible.

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## NOMENCLATURE

ADB/N	Agricultural Development Bank of Nepal
APROSC	Agricultural Projects Services Center
B-L	Brahman Large Farmer
B-S	Brahman Small Farmer
CARE/Nepal	Care of American Relief Everywhere
CBS	Central Bureau of Statistics
GDP	Gross Domestic Product
C-L	Chhettri Large Farmer
C-S	Chhettri Small Farmer
GO	Government Organization
HT-L	Hill Tribes Large Farmer
HT-S	Hill Tribes Small Farmer
Lo-L	Lower Castes Large Farmer
Lo-S	Lower Castes Small Farmer
NGO	Non-Government Organisation
NLB	Nepal Bank Limited
NPC	National Planning Commission
NRB	Nepal Rastra Bank
O-L	Other Castes Large Farmer
O-S	Other Castes Small Farmer
SFDP	Small Farmers Development Program
SFDP*	Small Farmers Development Project
SPO*	Sub-project Office
T-L	Tharu Large Farmer
T-S	Tharu Small Farmer

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\* Conveys same meaning



## CHAPTER I

### INTRODUCTION

#### Economic Setting

#### Socio-Economic Conditions of Nepal

Nepal faces complex social and economic problems based on diverse physiographic conditions, delicate ecological balances, open international borders, a multi-faceted social structure, and skewness of resource ownership and wealth distribution. Furthermore, policy interventions in directing economic and social change operate in the context of a mixed democratic/monarchy political system, free markets, and open borders.

From past experiences, the country has learned to address these multiple problems with multi-dimensional strategies. The recent 'Basic Needs Programme' and various 'Integrated Rural Development Programmes' have included macroeconomic and sectoral policies for enhancing economic development and have provided means for improving efficiency of public sector institutions, programmes, and investments. The financial and other public institutions have directed more and more resources to preferred sectors and groups so that production and employment opportunities are created and social awareness is raised concerning the interdependence of socio-economic and environmental problems.

The socio-economic/environmental problems are critical to rural Nepal where 90 percent of the population live. The country depends heavily on the agricultural sector which shares 55 percent in the GDP (Appendix Table A-1) and absorbs 91.4 percent of the labor force. However, during recent years, the sector's contribution to exports has decreased from 70 percent to 30 percent (World Bank, 1989).

Farming systems are diversified because of variations in climatic and topographical conditions due to variations in altitude. The country is 193 km wide (North-South) and 850 km long (East-West). There are three physiographical belts running east to west. The Tarai (plain) belt in the south (75-300 m), the hills in the middle (300-3000 m), and the mountains in the north (3000-8500 m). In the middle hills, there are several longitudinal valleys known as 'Inner Tarai' (Figure 1). The three physiographical belts occupy, respectively, 23, 42, and 35 percent of geographic area and 54, 37.4, and 8.6 percent of cultivated area supporting 44, 48, and 8 percent of the population. Total cultivated area is 16 percent of the total geographic area. Forest area, pastureland, perpetual snow area, and wasteland occupy 42, 12, 15, and 15 percent, respectively. Any increase in area under cultivation must come from depletion of the forest because there is little scope to bring pasture or snow and waste land under cultivation.

Distribution of land is highly skewed (Appendix Table A-2). Half of the 2.2 million families own about 6.6 percent of total cultivated land with an average of 0.15 hectares per family while the top 9 percent of families own 47.3 percent of total cultivated land. Considering an average of 1.03 hectares per family in the Tarai and 0.5 hectares per family in the hills as a sustainable family income threshold size (Appendix Table A-3), about 67 percent of the families need external support to supplement farm income from the undersized units.

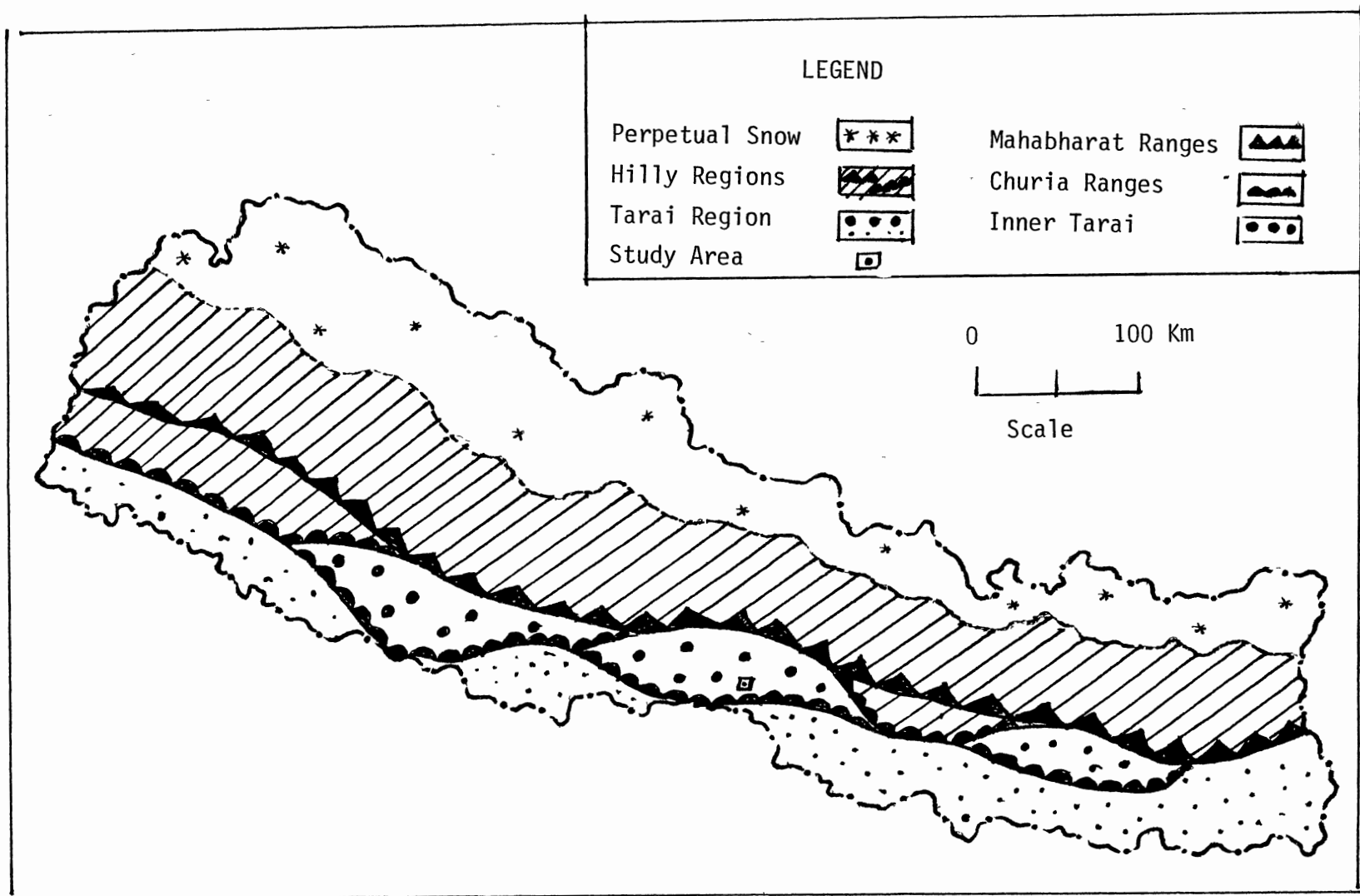


Figure 1. Physical Features of Nepal.

Population growth (2.6 percent annual rate) poses food deficit and forest depletion problems (Appendix Tables A-4 and A-5). Food production has fallen from 92 percent of the requirement in 1976, to 80-85 percent of the requirement in 1988 (World Bank, 1989).

Increase in food production is mainly due to area effect rather than yield effect (Yadav, 1987). Irrigation and chemical fertilizer use are key factors for increased food production. Area under irrigation (Appendix Table A-6) and consumption of chemical fertilizers (Appendix Table A-7) have increased over time. Similarly, areas under high yielding varieties (HYV) of major cereal crops have increased over time (Appendix Table A-8). Still, crop productivity has remained stagnant (Appendix Table A-9) due mainly to low productivity of marginal lands brought under cultivation over the years through forest depletion (Sapkota, 1986).

There is a finite limit on increasing cultivated area through forest depletion. Floods, landslides, soil erosion in the hills, and siltation in the Tarai and other ecological imbalances (Ives, 1987) are real threats from further continuation of this process. Overcutting of forest trees and over-use through grazing have caused the forest reserve to fall below sustainable levels. It is expected that in another two decades the total forest will disappear if the current depletion trend is maintained (World Bank, 1989).

Lack of interregional transport and communication facility, and malarial infestation in the Tarai belt caused a large proportion of the hill population to remain in the hill belt before 1950. Increased population density and poor land quality in the hill belt increased firewood and forage demand causing heavy deforestation. After malaria eradication in the late 1950's, the government nationalized the forest, increased timber sales for revenue generation, and implemented resettlement programs to the Tarai for purposes of relieving

population pressure in the hills. Eventually, spontaneous migration became greater than the government could resettle in a planned manner and migrants again encroached upon forest area. Consequently, the remaining forest of 3.2 million hectare (in 1985) is far less than the 8.1 million hectare needed to fulfill a sustained fuelwood and fodder demand (Appendix Table A-10).

Complete depletion of the forest seems to be certain unless there is a radical shift in the energy consumption pattern from traditional fuels to commercial base (Appendix Table A-11). However, alternatives such as fossil fuel and electricity are not within immediate reach of the majority of households. One alternative, biogas is costly for low income families to install and its efficiency decreases in cold areas. It also requires several head of livestock to obtain sufficient dung as input and most families can not maintain this herd size. Fuel efficient stoves are another alternative but adaptation has been slow. Afforestation on government land is still another partial solution. However, insufficient land is available to reverse the depletion trend.

The government's targets of fuel efficient stove distribution and community forestry programs are not sufficient to meet the expected increase in energy fuel demand arising from population growth (Wallace, 1987). Forest production in the private sector represents another partial solution. However, those able to allocate land to private forestry fear possible nationalization in the future.

Ninety percent of the Nepal population lives in rural areas. Thus, alleviating poverty to a great extent lies in improving agricultural productivity. However, there has been little growth in the agricultural sector. Poor performance of this sector is attributed to inadequate transport infrastructure, large number of poorly fed livestock with low productivity, inadequate and declining forage base, declining soil fertility due to environmental degradation, adverse and erratic weather conditions, ineffective irrigation delivery systems,

problems in availability and delivery of chemical fertilizer, slow progress in developing high yielding technology, and weak research and extension services (Yadav, 1987, World Bank, 1989).

To improve productivity and performance of the agricultural sector, the emphasis has been on government development expenditures. However, actual expenditures (Appendix Table A-12) made in the agricultural sector have remained significantly lower than allocated budget (Yadav, 1987).

Livestock is an integral part of the farming system in Nepal. It constitutes about 30 percent of agricultural output versus 60 percent for crops and 10 percent for forestry. Animal population (Appendix Table A-13) has not increased significantly over the period 1962/63 to 1984/85 mainly because of a decline in the forage base. Cattle population is virtually unchanged over the period while slight increases have occurred in buffalo, goats and sheep, and draft animals. Profitability of buffalo over cow, increased demand for mutton, and intensification of crops demanding timely availability of draft animals have caused these structural changes. In general, this sector is characterized by extremely low productivity because of poor genetic base, inadequate feeding, poor management, and widespread disease (Yadav, 1987). The government is investing resources to improve livestock as a supplemental activity to cropping systems. Symbiotic relationships between subsistence farming, forest growth, and forage production need to be identified and enhanced for purposes of expanding the livestock sector.

Generally, the price mechanism is an effective measure to equate supply and demand. But the location of the country in open borders with surrounding countries (Figure 2) does not permit successful price intervention policy. Secondly, financially constrained budgets would not permit implementation even if border problems were kept under control (Wallace, 1987).

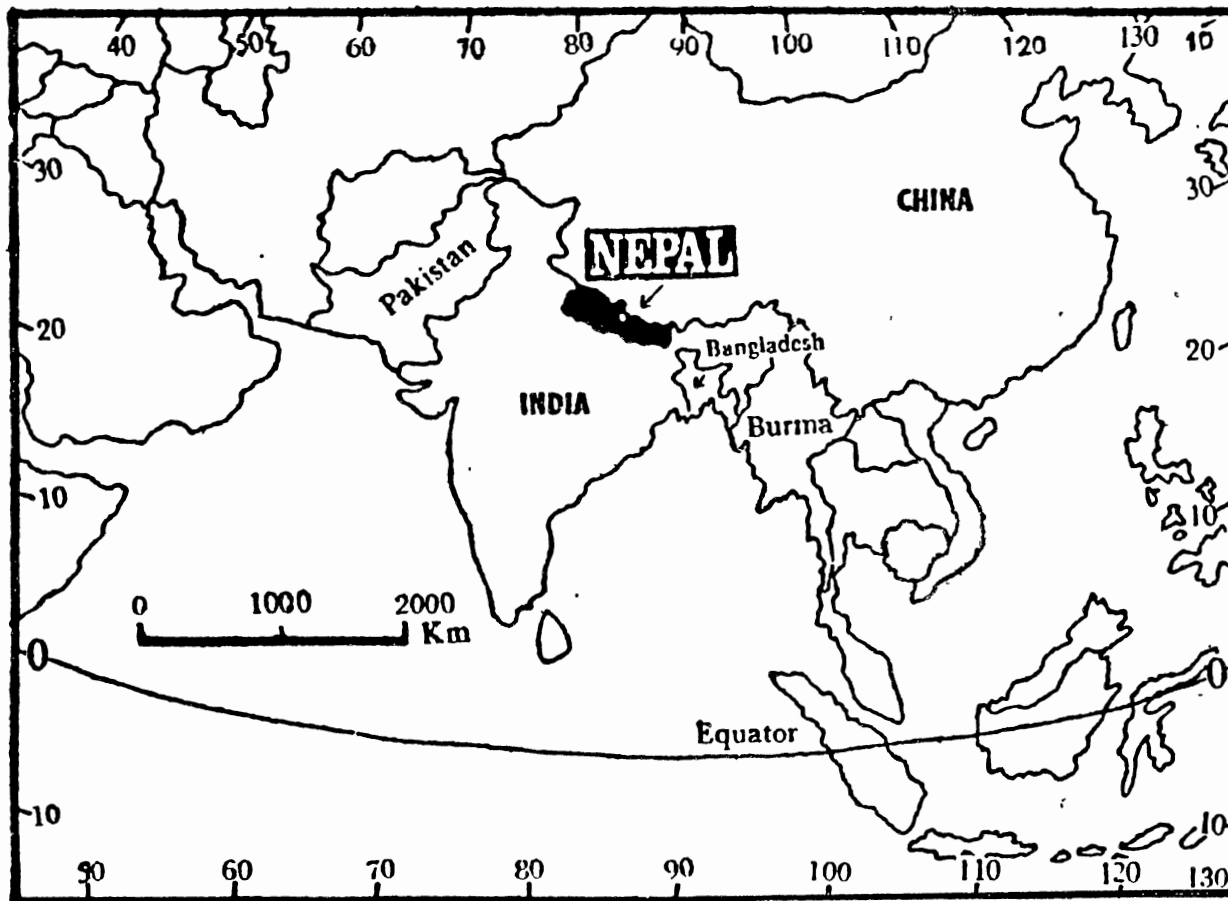


Figure 2. Location of Nepal with Respect to Its Neighbouring Countries.

## Religion and Caste

Nepal has a population of 17 million with an annual rate of growth of 2.6 percent over the last three decades. It has a multi-cultural, multi-racial, and multi-lingual society. Although dominated by the Hindu religion (89.5 percent), other religions include Buddhists (5.3 percent), Muslims (2.7 percent), and all other (2.5 percent). Mongol race is dominate in the mountain area, the Aryan race is dominate in the Tarai area, and both races with interracial mixtures are found in the hill area.

Hinduism in the past recognized four caste institutions based on division of labor. They are Brahmans (priest, knowledge seekers), Chhettris (warriors), Vaishya (merchants), and Shudras (low castes). Each caste group has many sub-castes, Figure 3. Except for Brahman and Chhettris, sub-castes in other caste groups differ widely between the hill and the Tarai areas. The institutional caste system remained active and strong for thousands of years. In the Hindu society, as the name suggests, Brahmans led the society from knowledge (education) and religion, Chhettris ruled politically, Vaishyas ruled financially, and Shudras remained the neglected group, those that serve society. In the past, the low caste group was always bypassed by policymakers. Any effort by the lower castes to move to upper class professions was taken as a crime.

As time passed, the institutional caste system became weaker and weaker. People of one caste group began adopting professions of other caste groups. This was the consequence of socio-economic changes such as education, monetization of the economy, industrialization of the ancient agrarian economy, and opening of societies to the external world.



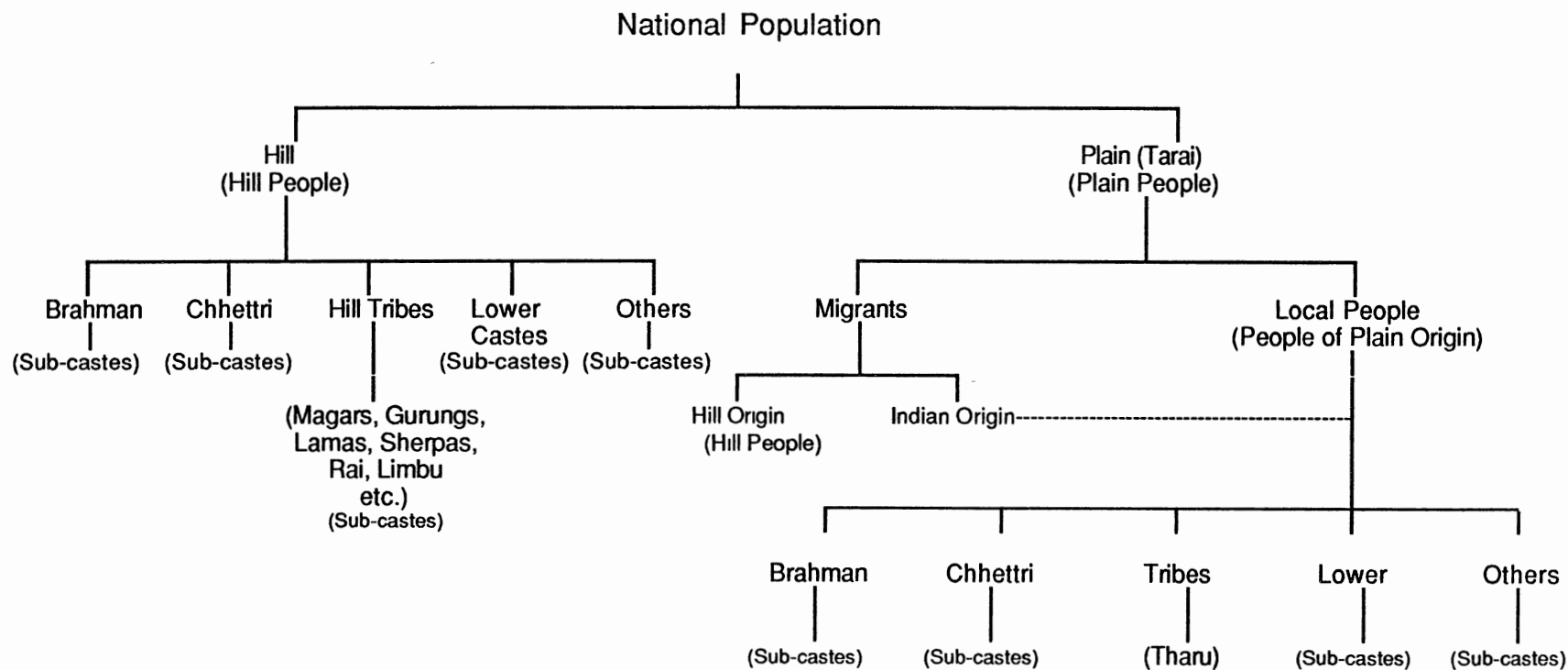


Figure 3. Population Structure by Geographic and Caste System

During the 1950's, Nepal initiated development plans under its new constitutional framework. The constitution recognized equal rights for each citizen. Theoretically, the new constitution did away with the caste system. This step was viewed as essential for national integration.

Insufficient data are available to identify interrelated economic relationships of the caste system in the pre-plan era. After the 1950's the government did not maintain (as per constitution) a data base on the caste issue. Thus, information on caste behavior in relation to socio-economic variables is not available. Nevertheless, studies indicate that caste groups differ significantly in attitude towards innovativeness/-entrepreneurship/receptivity and thus public programs have differential impacts on caste groups (Bhandari et al., 1986; Dignan et al., 1979; Sah, 1984; Sah, 1985). Though power and wealth distribution are related to caste hierarchy (Regmi, 1971), one thing is always common with all caste groups, that is, the majority of households in each caste suffer from poverty.

### Government Institutions

Government programs and policies have always tried to address issues using multi-dimensional approaches because no single variable has been isolated as the casual factor. Many development oriented programs have been undertaken to address specific issues under various national/international agencies. However, 'Integrated Rural Development Programs (IRDP)' appeared appropriate as they addressed multi-sectoral issues simultaneously. They are generally funded by donor agencies and are confined to certain target areas of the country. Under IRDP, a heavy investment is made in building

infrastructure. Consequently, the government may not be willing or able to commit to country-wide replications of IRDP's.

The government has tried to create a grass-root level institution which serves within the framework of the people's own planning and participation. Until 1975, cooperatives were the only financial institution operating at the grass-root level under the framework of peoples own planning and participation. However, limited financial resources and heavy political commitment have severely hindered its growth and development. Most commercial banks have remained confined to urban areas. The Agricultural Development Bank of Nepal (ADB/N) has penetrated rural areas but it's rigidity on 'mortgage requirements' (under regular lending activity) has led to serving large farmers more often than small farmers and the landless.

During 1975, the Small Farmers Development Program (SFDP) emerged with an objective to ameliorate the socio-economic conditions of the rural poor under a framework of the people's own planning and participation and mobilization of locally available resources. Though the ADB/N is the executing agency, heavy emphasis is placed on social programs while keeping feasible government services (detail in Appendix Table A-14). The program relies heavily on cooperation from various government/non-government (GO/NGO) agencies although the government has no commitment for any investment in this program. Also, no financial collateral is required for financing. Commitment of beneficiary group members for utilization and repayment of loans is the basis of funding. Thus, success of the program lies in the ability of proponents to win people's sentiment and at the same time attract GO/NGO services delivered in their project area.

The SFDP has grown rapidly. By 1988/89 there were 416 sub-project offices (SPO's) benefiting 96,814 members through credit and other social

programs (Appendix Tables A-15 and A-16). Though expansion was rapid in terms of ADB/N's resources, it was slow in covering only about 5-7 percent of target families over the 13 year period.

Commercial banks have also expanded services in rural areas under directive of the government. Credit disbursements from various financial institutions have significantly increased over time (Appendix Table A-17). However, people still depend heavily on private money lenders for credit needs (Nepal Rastra Bank, 1988, 1982, 1981). A comparison of the institutional interest rates (Appendix Table A-18) with the inflation rate (Appendix Table A-1) or price Index (Appendix Table A-19) indicates a precarious situation for the viability of the financial institutions themselves and the need for an indepth study of credit markets (World Bank, 1989) .

The government's commitment to alleviate poverty and improve income distribution typifies the "Basic Needs Program" which places entire attention on increasing production and employment so as to fulfill minimum basic needs (food, clothing, housing, education, health, security) of the common man. Considering only the agricultural sector, food self-sufficiency implies food grain production increase of 4.8 percent per annum compared to the 1.5 percent increase from 1974/75 to 1985/86. For it, grain productivity would need to increase at 3.7 percent per annum versus the annual decline of 0.5 percent and irrigation coverage would need to expand by 68,000 hectares annually (World Bank, 1989).

The government has taken bold steps to achieve the goal of fulfilling basic needs including the Structural Adjustment Program (SAP) introduced to strengthen macro-economic and sectoral development policies and improve efficiency of public sector investments and institutions (World Bank, 1989).

## Problem Statement

Past studies indicate that development plans frequently do not benefit equally all groups within a target population. Inherent attitude differences from person to person and group to group create two clear strata in the target population. Upper class groups are more innovative and receptive in responding to government programs. Lower class groups are less innovative/receptive and respond more slowly to government programs. Success of government programs lies in how efficiently all groups respond within the overall target population.

Many studies have evaluated performance of the SFDP. Even though ADB/N's definition of a small farmer is narrower than that given by the government, and even though SFDP tends to reach the lower stratum faster, still evaluation studies indicate that it does not reach all the target groups. The issues include: Who are the groups that tend to be left behind? Why does it happen? Are there ways to ensure greater participation of all groups in government programs? Is it necessary for the government to make further structural adjustments in programs and policies to assure that deprived groups participate more fully? Such questions are timely and pertinent in the development of rural Nepal.

Upper and lower stratum groups may be identified within a caste system and/or by income level. In the process of identifying the 'left behind' groups, it is hypothesized that families of different groups behave differently in regard to program participation and sharing in program benefits. There is growing evidence that different caste/ethnic groups falling within the same income class behave differently because of differences in cultural attitudes (Sah, 1984; Sah,

1986; Dignan et. al., 1979; APROSC, 1985). Thus, it becomes essential to identify those 'left behind' groups not only by income level but also by caste/ethnic group. Past studies have not been comprehensive in identifying all activities engaged in by income and caste/ethnic group, in establishing resource ownership by income and caste/ethnic group, and in quantifying the interdependencies of activities and commodity and factor markets at the community or village level. This study will empirically estimate the interdependencies of activities and commodity and factor markets at the village level by means of a Social Accounting Matrix (SAM).

### Objectives

The overall objective of this study is to structure a village level economy in the Tarai region of Nepal and to empirically estimate the structure for purposes of evaluating household income distribution by caste and farm size. The general framework of analysis is a village level Social Accounting Matrix (SAM) with additional data and modelling for purposes of evaluating government programs and policies for their impacts on household income distribution.

Specific objectives of the study include the following:

1. Formulation of a village level SAM identifying households by caste and farm size.
2. Empirical estimation of the SAM for a village system in the Tarai region using household and community survey data to construct the integrative accounts of activities, commodities, factors, households, and financial institutions.

3. Utilization of the SAM to analyze the income distribution effects by household caste and farm size associated with structural conditions in the village system economy.
4. Utilization of the SAM to evaluate household (caste and farm size) and community effects associated with government programs such as the SFDP and with private and public credit programs.

### Organization

Following the introductory chapter, an overview of the study area with respect to caste setting is presented in Chapter II. Related literature is reviewed and methodological aspects are dealt with in Chapter III. Empirical results of the SAM and interpretation of findings are presented in Chapter IV. Chapter V includes further analysis and policy implications. Finally, Chapter VI contains the Summary and Conclusions.

## CHAPTER II

### REGIONAL SETTING

Economic development of a region is influenced, to a large extent, by the quantity and quality of resources available in the region. Factors such as land, labor, infrastructural facilities, and climatic conditions are important for agriculture and area development. In this chapter, a description of the study region is presented by characteristics such as location, topography, soil type, climate, demographic structure, land utilization, and infrastructural facilities.

#### Regional Resources

The study area of Kumroj Panchayat<sup>1</sup> is located at 80°32' North latitude and 270°35' East longitude in the Chittown district. It is about 90 Km southwest of Kathmandu and it is bordered by the perennial rivers Budhi Rapti to the north and Rapti to the south (Figures 4 and 5).

Clay, sandy loam, silty loam, and clay loam are the major soil types. The area has sub-tropical humid climate suitable for a variety of summer/winter crops, vegetables, and fruits.

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<sup>1</sup> Panchayat is the basic political/development unit. It has a population from 2,000 to 10,000 and is composed of a cluster of hamlets. Nepal is politically divided into 75 districts. Each district consists of several panchayats.



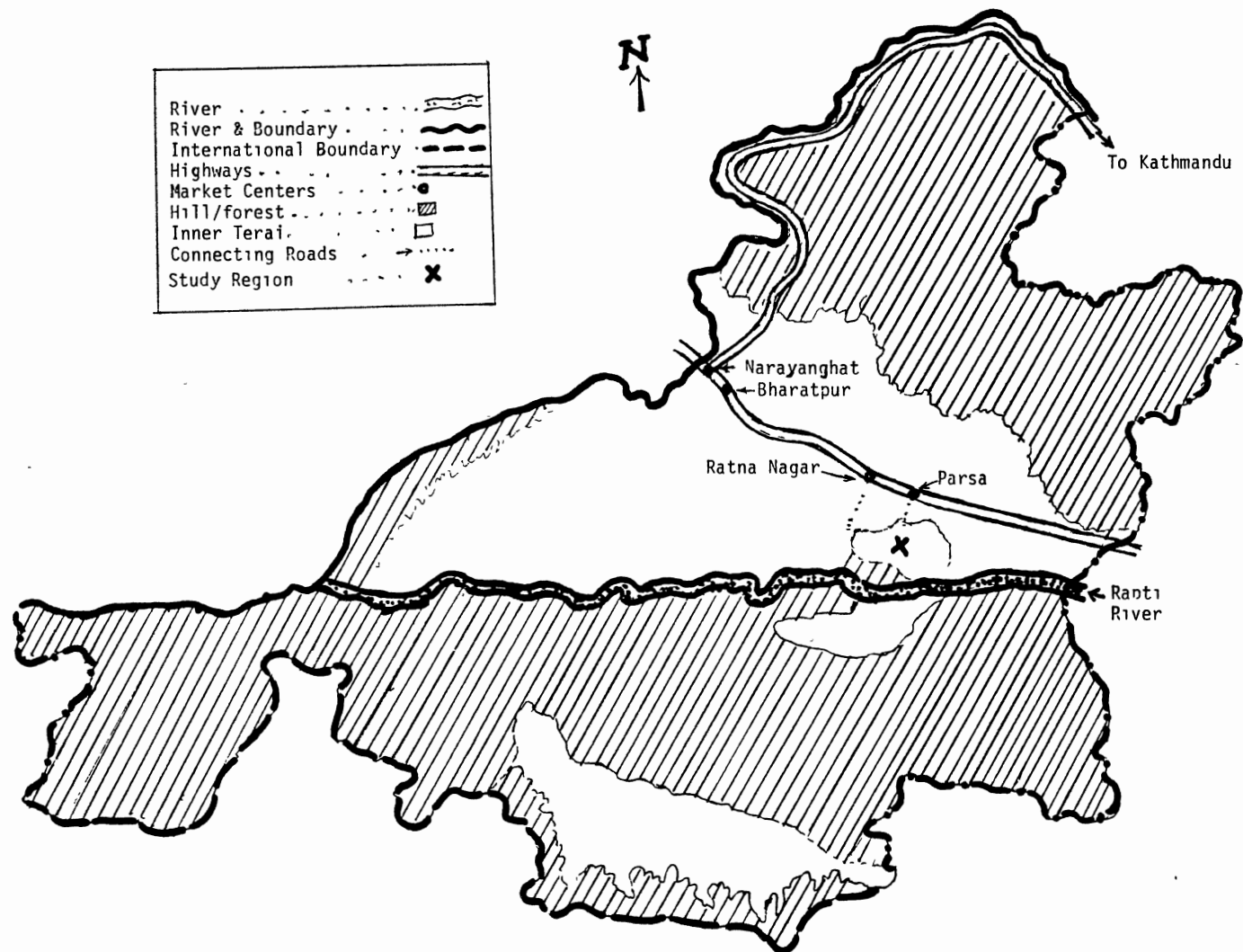


Figure 4. Chittown District, Study Area, and Communication Facilities

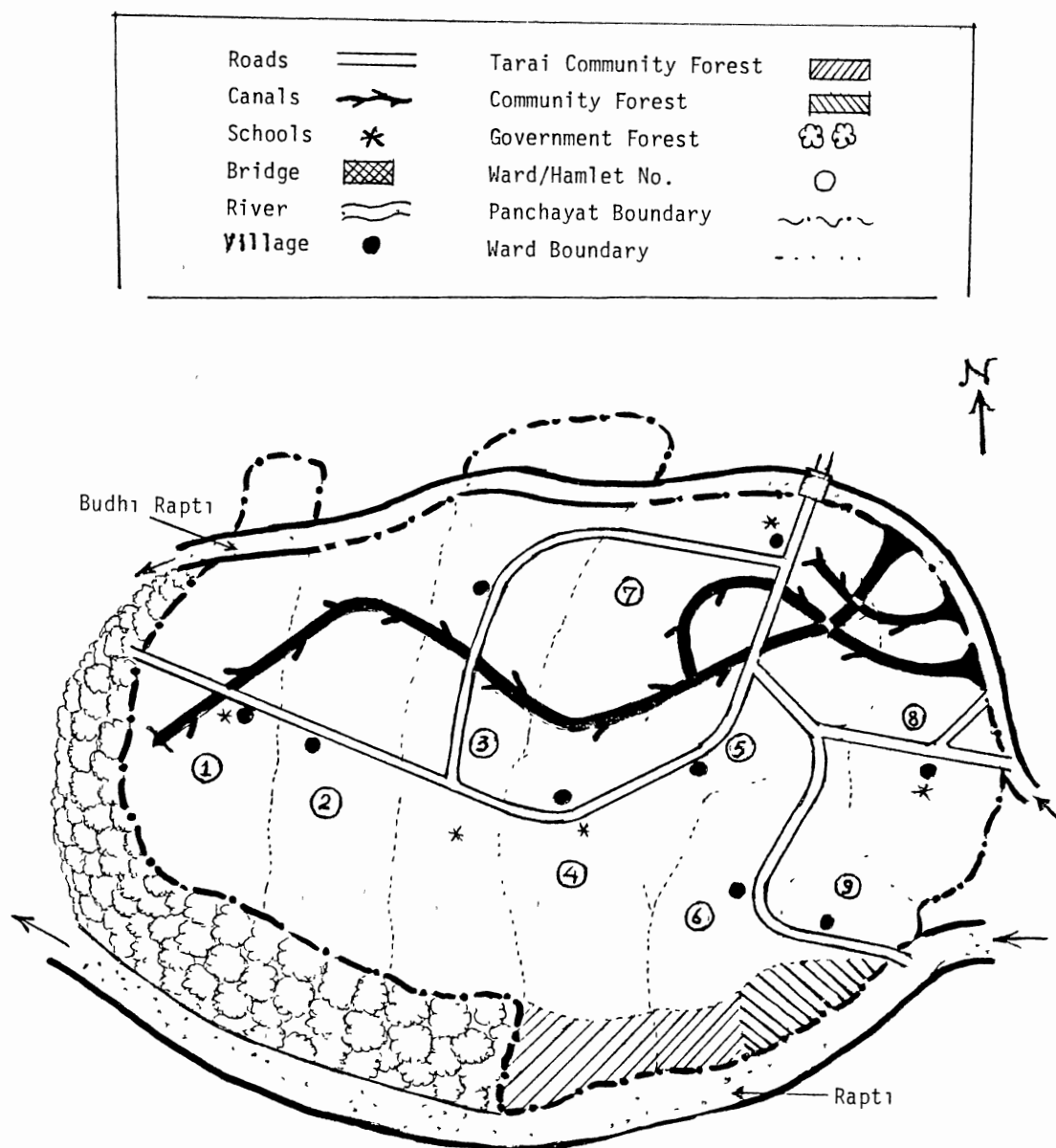


Figure 5. Study Region

### Historical Perspective

Prior to 1950, the Chittown district was covered by dense forest with plenty of wildlife. Because it was infested by malaria, few migrants came to the area to settle. Tharus (local tribes) were the only people living in the area. The economy was essentially closed and non-monetized.

A malaria eradication program launched by the government in the late 1950's, made this zone safe. Organized resettlement programs and road infrastructure created by the government led to an influx of migrants from the hills. There were four kinds of migrants: (1) those receiving land grants; (2) those who purchased land on their own from other individuals; (3) those who settled by encroaching upon the forest lands; and (4) those who could not obtain land and thus remained landless. Over time, the Tharus became a minority population. They sold or lost (through exploitation) a large portion of their land to the migrants. Because they had few other sources of income, they soon faced widespread poverty. Subsequently, the government has put some restrictions on the sale of Tharus land but the trend of a reduced land base for the indigenous group has continued, though at a slower rate.

Almost all of the new migrants came from the hills. Hence, the study area has two distinct cultures: hill culture and Tharu culture. Some striking dissimilarities exist between the two cultures. Animal dung is used by Tharus as a major source of fuel for cooking and heating whereas the hill people use firewood and crop by-products for fuel and reserve dung as manure for their fields. Tharus, traditionally, have depended on fish, snails, and poultry as a major source of protein. A significant amount of their labor is spent catching fish and snails in the rivers, ponds, and wetland areas. They do not have a strong

preference for milk and milk products. Conversely, hill people depend heavily on milk and milk products as a source of protein and supplemental income. Hence, a large amount of household labor for the hill people is spent in rearing and tending livestock. Hill people tend to invest more in human capital (education), and lead a freer life. In contrast, Tharus do not have such tendencies and remain as farm servants and bonded labor. Tharus are less innovative and less consumption oriented while hill people (except Hill Tribes and Lower Castes<sup>2</sup>) are more management and investment oriented. Food habits differ by cultural group. Traditionally, liquor is more widely consumed among Tharus, Hill Tribes, and Lower Castes but remains restricted among Brahmans and Chhettris. It is interesting to know that over time, presence of migrant hill society has brought many changes in the Tharu culture. Among the hill people, Brahman, Chhettris, and Hill Tribes (Magars, Gurungs, Rais, and Limbus) constitute the majority followed by Lower Castes including Damai (tailors), Sarki (cobblers), and Kami (blacksmith). Others Castes include Newars, Muslims, and Kayasthas.

No chronological record is available regarding demographic structure (by caste) and resource distribution in the study area. The village panchayat office depended on the malaria eradication office (which updates population records from time to time) for demographic statistics. The first census of the village panchayat was completed in late 1983 by the Small Farmers Development Project<sup>3</sup> (SFDP), Kumroj. The present study uses as a benchmark the records available from the SFDP.

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<sup>2</sup> Hill people, in this study area, consist of Brahmans, Chhettris, Hill Tribes, and Lower Castes (see Figure 3). Hill Tribes are less innovative/receptive than Brahmans, Chhettris, and Other Castes. Lower castes are professionally innovative but do not tend to achieve fast economic growth.

<sup>3</sup> A specific SFDP office is also called a Sub-Project Office (SPO).

### Demographics by Caste and Landholdings

Current demographic information for 1989 available from Nepal Malaria Eradication Organization (NMEO) is compared to the 1983 information from the SFDP (Table I). In 1983, there were 750 households in the area consisting of 31.1, 12.9, 28.0, 14.0, 7.9, and 6.1 percent for Brahman, Chhettri, Tharus, Hill Tribes, Lower Castes, and Other Castes, respectively.

In all, 13 percent of the households were large farmers<sup>4</sup> and 87 percent of the households were small farmers<sup>5</sup> (69 percent small/marginal and 18 percent landless). The majority of the large farmer households belonged to Brahman followed by Tharus and Chhettris. Among small farmers, the majority was Tharus followed by Brahmans, Hill Tribes, and Chhettris. Incidence of landlessness was maximum among Tharus followed by Hill Tribes, Lower Castes, Brahmans, Other Castes, and Chhettris.

In 1983, the area had a population of 5,058 (Table II), 31.4 percent of which came from Tharus households followed by Brahmans (30.6 percent), Chhettris (12.7 percent), Hill Tribes (11.8 percent), Lower Castes (8.1 percent), and Other Castes (5.4 percent). Average household size was 6.7. Tharus household size was more than average (7.5) while household size of all other castes was either less than or equal to average.

Over five years (1983/84 - 1988/89), the average household size has grown to 7. Household size of Tharu, Hill Tribes, and Lower Castes increased; Brahman and Chhettri household size remained constant; and Other Castes' household size declined (Table II).

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<sup>4,5</sup> Farmers classified as large or small based on income criterion followed by ADB/N. See page 76 for details.

TABLE I  
NUMBER OF HOUSEHOLDS BY CASTE AND FARM SIZE  
FOR 1983 AND HOUSEHOLDS BY CASTE  
FOR 1989, KUMROJ PANCHAYAT, NEPAL

Caste	Number of Households in 1983				Total in (1983)	House- holds in 1989	In- crease (%)
	Large Farmer	Small Farmer		Sub- Total			
		Land- holder	Landless				
Brahman	51 (21.9) 51*	173 (74.2) 33.5*	9 (3.9) 6.8*	182 (78.1) 28*	233 (100) 31.1*	296 -- 32.0*	27.0 -- --
Chhettri	16 (16.5) 16*	77 (79.4) 14.9*	4 (4.1) 3*	81 (83.5) 12.5*	97 (100) 12.9*	133 -- 14.4*	37.1 -- --
Tharu	22 (10.5) 22*	119 (56.7) 23*	69 (32.8) 51.9*	188 (89.5) 28.9*	210 (100) 28*	250 -- 27.1*	19.0 -- --
Hill Tribes	3 (2.9) 3*	77 (73.3) 14.9*	25 (23.8) 18.8*	102 (97.1) 15.7*	105 (100) 14*	130 -- 14.1*	23.8 -- --
Lower Castes	1 (1.7) 1*	40 (67.8) 7.7*	18 (30.5) 13.5*	58 (98.3) 8.9*	59 (100) 7.9*	66 -- 7.1*	11.8 -- --
Other Castes	7 (15.2) 7*	31 (67.4) 6*	8 (17.4) 6*	39 (84.8) 6*	46 (100) 6.1*	49 -- 5.3*	6.5 -- --
Total	100 100*	517 100*	133 100*	650 100*	750 100*	924 100*	23.2 -- --
Percent	(13)	(69)	(18)	(87)	(100)	--	--

Source: SFDP, Kumroj  
Family Planning Unit, Kumroj  
NMEO, Ratna Nagar  
Village Health Worker, Kumroj  
Numbers in ( ) indicate row percentages  
Numbers with \* indicate column percentages

TABLE II  
POPULATION AND SIZE OF HOUSEHOLD BY CASTE  
AND LANDHOLDINGS, 1983 AND 1989,  
KUMROJ PANCHAYAT

Caste	Size of Household		Population	
	1983	1989	1983	1989
Brahman				
Large Farmer	6.5	7.0	331	357
Small Farmer	6.7	6.6	1219	1617
Chhettri				
Large Farmer	6.3	6.3	101	101
Small Farmer	6.7	7.3	543	854
Tharu				
Large Farmer	6.5	7.0	143	154
Small Farmer	7.7	8.4	1448	1915
Hill Tribes				
Large Farmer	5.5	5.7	16	17
Small Farmer	5.7	6.2	581	787
Lower Castes				
Large Farmer	5.0	6.0	50	6
Small Farms	6.9	7.0	400	455
Other Castes				
Large Farmer	7.0	6.5	49	45
Small Farmer	5.7	5.5	222	214
Total	6.7	7.0	5058	6522

Source: SFDP, Kumroj  
Sample Survey, 1989

Number of households also increased in the area, especially among Chhettris (37.1 percent), Brahmans (27.0 percent), Hill Tribes (23.8 percent) and Tharus (19.0 percent), Table I.

### Occupations

Increased job opportunities outside the region caused the temporary out-migration of some Brahmans and Chhettri family members. Outmigration and breaking up of extended families caused the family sizes to remain more or less constant. Furthermore, the influx of migrants each year increased the number of households and population. In the case of Tharu households, some in-migration occurred from adjoining village panchayats. Though this kind of migration was not common, higher wage/employment opportunities in the study region did attract landless/marginal Tharu families from other panchayats.

No study has been done to identify the migrants and classify them according to economic status (large or small farmers). It is also not known as to what proportion of the added households came from within the region as a result of family division and what proportion came as migrants. For migrant households it can be inferred that most are landless or with marginal land holdings. They depend more on off-farm/non-farm/livestock income. They tend to undertake production activities and have consumption expenditure patterns similar to their own caste already living in the region.

Occupationally, all households were either farmers or farming dependent agricultural laborers and share croppers. Livestock activities supplemented family income. Non-farm employment (government/private) tripled in five years (Table III). Most employment opportunities were available outside the region.



TABLE III  
NON-FARMING INCOME SOURCES BY CASTE,  
KUMROJ PANCHAYAT, 1983 and 1989.

(Number of Households)								
Caste	Year	Trade	Clinics	Government or Private Services	Other Occupations*	Pension	Cottage	Total
Brahman	1983	2	0	12	0	0	2	16
	1989	13	2	41	0	2	3	61
Chhettri	1983	2	1	11	0	1	1	16
	1989	7	1	18	0	4	1	31
Tharu	1983	2	0	2	3	0	0	7
	1989	12	0	5	7	0	1	25
Hill Tribes	1983	1	0	3	1	4	0	9
	1989	5	0	4	3	5	0	17
Lower Castes	1983	0	0	0	5	0	0	5
	1989	0	0	0	7	0	0	2
Other Castes	1983	1	0	1	0	0	0	2
	1989	4	0	5	0	0	0	9
Total	1983	8	1	29	9	5	3	55
	1989	41	3	73	17	11	5	150

Source: SFDP, Kumroj  
Sample Survey, 1989

\* Occupations such as tailoring, blacksmithy, etc.

Brahmans and Chhettris availed themselves of these opportunities most frequently. Outside region employment has allowed some income transfers back to the villages. Pensions are another source of income inflow from the Rest-of-Nepal. Trade services have grown rapidly (Table IV). During the 1983/84 period, there were 8 different shops while in 1988/89 there were 41. One-third of the shops (in 1988/89) were operated by Brahmans followed by Tharus and Chhettris. Large farm Brahmans did not operate tea stalls and liquor shops. Liquor shops were concentrated in the hands of the Tharus and Hill Tribes (Table IV).

TABLE IV  
CASTEWISE DISTRIBUTION OF BUSINESSES  
THAT OFFERED TRADE SERVICES (1989)

Shop/Caste	(Number of Households)						Total
	Brahman	Chhettri	Tharu	Hill Tribes	Lower Castes	Other Castes	
Retail stores only	2	2	2			1	7
Retail stores and tea stall	6	3	5	2		3	19
Tea stall only	5	2		1			8
Liquor shop			3	2			5
Snacks plus bakery			2				2
Total	13	7	12	5	0	4	41

## Asset Holdings

Land is the main asset for rural households followed by houses, livestock, and other items.

Land. In total, 1,270 Bigha<sup>6</sup> of land is owned by the village households. About 36 percent of the land is owned by large farmers. Among large farmers, Brahmans own the most land followed by Tharus, Chhettris, and Other Castes. Almost the same trend existed among small farmers (Table V). In total 40.4, 17.4, 25.5, 7.6, 3.2 and 5.9 percent of land was owned by Brahmans, Chhettris, Tharus, Hill Tribes, Lower Castes, and Other Castes, respectively. On an average, Other Castes owned the highest amount of land per household followed by Chhettris, Tharus, and Brahmans. In 1983/84, Tharus possessed the maximum proportion of irrigated land followed by Lower Caste (large) and the large farm Brahmans. Small farmers, in general, had the highest share of non-irrigated land. In 1983/84, only 35 percent of their total land area was irrigated. Five years later, because of a community irrigation project, 81 percent of the land was irrigated. Except for Hill Tribes (small farm) and Lower Castes (small farm), all Other Castes had more irrigated land than non-irrigated (Table VI) in 1989.

Buying and selling of land was active during the 1983/84 to 1988/89 period. Economic hardship, high land prices, investment opportunities elsewhere, and repayment of loans, were major causes that invoked land sales. Buying and selling of land occurred in all of the castes. However, Brahmans and Chhettris were, in general, the net buyers and Tharus, Hill Tribes, and Lower Castes were net sellers. Land price increased from

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<sup>6</sup> 1 Bigha = 1.67 Acres.

TABLE V  
LAND OWNED, LEASED OUT, LEASED IN, AND CULTIVATED  
BY CASTE AND FARM SIZE, KUMROJ PANCHAYAT,  
1988/89

(bighas)							
Caste and Farm Size	Land Owned			Land Leased		Total	
	Total*	Per Household	Cultivable Total	Leased Out	Leased In	Cultivated	Cultivated Per Household
Brahman							
Large	218.0	4.3	202.0	2.0	0.0	200.0	3.9
Small	295.0	1.6	286.0	3.8	9.3	291.5	1.2
Chhettri							
Large	90.0	5.6	90.0	30.0	0.0	60.0	3.7
Small	131.0	1.6	117.0	2.0	11.6	126.1	1.1
Tharu							
Large	92.0	4.2	88.0	0.0	0.0	88.0	4.0
Small	232.0	1.2	225.0	2.0	15.8	238.8	1.0
Hill Tribe							
Large	10.0	3.3	10.0	0.0	0.0	10.0	3.3
Small	87.0	.9	87.0	0.0	14.4	101.4	0.8
Lower Castes							
Large	2.5	2.5	2.5	0.0	0.0	2.5	2.5
Small	38.0	0.7	38.0	0.0	1.5	39.5	0.6
Other Castes							
Large	49.0	7.0	49.0	9.8	0.0	39.2	5.6
Small	25.0	0.6	21.2	0.0	1.0	22.2	0.5
Total							
Large	461.5	4.6	441.5	41.8	0.0	399.7	4.0
Small	808.0	1.2	774.2	7.8	53.6	821.0	1.3
School	6.0	--	4.0	4.0	0.0	0.0	0.0
Total	1275.5	--	1219.7	53.6	53.6	1219.7	--

\* Estimated from base year (1983/84) after adjustment for net land sale/purchase over 5 years. Information on sale and purchase of land was available from sample survey done for this study.

Total Land = Cultivable land + waste land + land used for dwelling, (actually owned) orchard and other purposes.

Cultivated land = cultivable land - leased out land + leased in land

TABLE VI  
IRRIGATED AND NON-IRRIGATED LAND DISTRIBUTION  
BY CASTE AND FARM SIZE, 1983 AND 1989,  
KUMROJ PANCHAYAT

Caste	(Bighas)											
	1983						1989					
	Large Farm			Small Farm			Large Farm			Small Farm		
	I	UI	Total	I	UI	Total	I	UI	Total	I	UI	Total
Brahman	122 0	90 0	212 0	68 0	209 0	277.0	192 0	26 0	218 0	257 0	38 0	295 0
Chhettri	28 0	60 0	88 0	22 0	100 0	122 0	90 0	--	90 0	110 5 0	21 0	131 5
Tharu	65 0	37 0	102 0	125 0	125.0	250 0	79 0	13 0	92 0	199 0	33 0	232 0
Hill Tribes	2 0	9 0	11.0	4 0	86 0	90 0	10 0	0 0	10 0	24 0	63 0	87 0
Lower Castes	2 5	1 5	4 0	6.0	33 0	39 0	1 0	1 5	2 5	11 0	27 0	38 0
Other Castes	10 0	37 0	47 0	--	28 0	28 0	39 7	9 3	49 0	14 0	11.0	25 0
Total	229 5	234 5	464 0	225 0	581 0	806 0	411 7	49 8	461 5	615 5	193 0	808 5
Percent	49 5	50 5	100 0	28 0	72 0	100 0	89 2	10 8	100 0	76 1	23 9	100 0

Source: SFDP, Kumroj  
Sample Survey, 1989

I = Irrigated  
UI = Unirrigated

Rs. 40,000<sup>7</sup>/bigha in 1983/84 to Rs. 100,000/bigha in 1988/89. Increased wealth of households, increased productivity from irrigation, and increased demand for land from migrants were major causes for the price rise.

The Gini ratio (by land ownership decile) was computed based on 1983/84 land ownership distribution for all the households. The Gini ratio value

<sup>7</sup> Depending on location and irrigation status, price varied between Rs 20,000 - Rs 60,000 per bigha.

was 0.56 which shows skewness in land distribution. As has happened elsewhere in Nepal (Sharma, 1987)<sup>8</sup>, transfer of ownership over 5 years has further increased skewness. Because land (crop) is the main source of income for most rural households, skewness in income distribution can be expected to be in similar trend as that of skewness in land ownership.

Permanent share cropping was common until the early 1960s. Landless/marginal farmers were the major share croppers. Later, land reform gave tenancy rights to tenants. Consequently, landlords stopped making permanent share-cropping arrangements. Present conditions are such that landlords do not give the same land to the same tenant for more than one crop period. Under these arrangements, about four percent of the land was leased out mostly by Chhettris (large farm) and Other Castes (large farm) while Tharus (small farm) and Hill Tribes (small farm) leased in the most land (Table V).

Buying land and building houses in nearby towns is an attraction for many. Some have built houses in town, live there, and operate businesses. Some have built houses and have rented them out. It is estimated that there is an inflow of Rs. 60,000/year in the region from house rents.

Livestock. On average, each household held 6 to 7 (3.58 livestock units LSU) animals which include draft animals (1.5), milch animals (2.0), and meat animals (.08) LSU. Large farmers, in all castes, owned more animals than small farmers. Also, in LSU terms, Brahman households owned the largest number of animals (4.7) followed by Tharus (3.4), Other Castes (3.4), Chhettris (3.3), Hill Tribes (2.7), and Lower Castes (1.2). Among milch animals, Tharus

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<sup>8</sup> Gini ratio for land distribution in Nepal was 0.54 in 1961, 0.61 in 1971, and 0.65 in 1981.

owned more (low yielding) cows while the rest of the castes owned more (high yielding) buffaloes.

Draft animals are an important part of the farming system. Each farmer would like to maintain draft animals to avoid the risk of not having ploughing service available during peak periods (or saving family cash outflow) even though draft animals remain idle during the off season (Table VII).

Other Assets. Farm machinery, farm equipment, household utensils, houses, cattle shades, drinking water and irrigation systems, furniture, bicycles, and cash and ornaments were other forms of assets owned by households.

Five tractors were found to be working in the area. Two belonged to Brahman (large farmers), two belonged to Other Castes (large farmers), and one belonged to Tharu (large farm). Use of tractors has sharply increased in the area. Increased intensification of farming, reduced time between crops, and inability of animal draft power to complete ploughing between crops, have put heavy demand on tractor services. About one-third of the total demand is met by importing ploughing (tractor) services from adjoining panchayats.

In value, housing accounted for a major part of the remaining assets. Quality of housing was found to have increased over the five year period, especially for Brahmans and Chhettris. Excluding farm machinery, Chhettris (large farm) had maximum 'other assets' followed by Other Castes (large farm), and Brahman (large farm). Among small farmers, Chhettris had the largest 'other assets' followed by Brahmans, and Tharus (Table VIII).

The number of bicycles was found to have increased about five-fold in five years. It has become an important means of transport, especially for high school and college students. Brahmans and Chhettris owned most of the bicycles (Table VIII). Bikes also served the purpose of transporting small quantities of food and non-food commodities.

TABLE VII  
LIVESTOCK OWNERSHIP BY CASTE AND FARM SIZE,  
1989,KUMROJ PANCHAYAT

(Adult Equivalent Unit)														
Caste and Farm Size	Draft Animals				Milch and Meat Animals									
	Yng/old	Adult	Sub-Total	Per Household	Milch Animals			Meat Animals			Milch & Meat Sub-Total	Per House-hold	Total Livestock	Per House-hold
					Yng/old	Adult	Sub-Total	Yng/old	Adult	Sub-Total				
Brahman														
Large	57	48	105	2.0	122.0	132.0	254.0	3.0	3.0	6.0	260	5.1	365	7.1
Small	177	164	341	1.4	347.0	333.0	680.0	12.0	8.0	20.0	700	2.8	1041	4.2
Chhettri														
Large	26	23	49	3.1	52.0	40.0	92.0	2.3	1.7	4.0	96	6.0	145	9.1
Small	50	63	113	1.0	93.0	76.0	169.0	4.0	3.0	7.0	176	1.5	289	2.5
Tharu														
Large	15	37	52	2.4	24.0	19.0	43.0	2.0	1.0	3.0	46	2.1	98	4.5
Small	158	257	415	1.8	175.0	150.0	325.0	10.0	5.0	15.0	340	1.5	755	3.3
High Tribes														
Large	2	5	7	2.3	4.0	3.5	7.5	0.3	0.2	0.5	8	2.7	15	5.0
Small	68	102	170	1.3	88.0	63.0	151.0	7.0	3.0	10.0	161	1.3	331	2.6
Lower Castes														
Large	2	2	4	4.0	0.7	2.0	2.7	0.2	0.1	0.3	3	3.0	7	7.0
Small	21	14	35	0.5	22.0	13.0	35.0	3.0	2.0	5.0	40	0.6	75	1.1
Other Castes														
Large	5	11	16	2.3	15.0	10.0	25.0	0.7	0.3	1.0	26	3.7	42	6.0
Small	30	33	63	1.5	35.0	23.0	58.0	2.5	1.5	4.0	62	1.5	125	3.0
Total	611	759	1370	1.5	977.7	864.5	1842.2	47.0	28.8	75.8	1918	2.0	3288	3.5



TABLE VIII  
VALUE OF OTHER ASSETS PER HOUSEHOLD HOLDINGS  
BY CASTE AND FARM SIZE, 1989, KUMROJ PANCHAYAT

(Rs 000)										
Caste	Farm Machinery	Farm Equipment	Household Utensils	House	Cattle Shade	Drinking Water, Irrigation Structure	Furniture	Cash & Ornaments	Bicycles	Total Other Asset
Brahman										
Large	10.0	0.5	3.1	37.0	3.8	2.2	5.0	15.7	1.2	78.5
Small	0.05	0.4	1.6	16.0	3.0	1.5	2.9	6.1	3.0	31.9
Chhettri										
Large	0.0	0.5	3.6	48.0	5.0	2.4	6.5	35.0	1.2	102.0
Small	0.0	0.4	2.2	19.0	1.5	1.3	3.1	8.2	0.3	36.0
Tharu										
Large	7.2	0.4	1.3	15.7	1.7	1.0	2.0	6.7	0.5	37.0
Small	0.03	0.3	0.4	4.3	1.2	0.3	1.3	1.5	0.2	9.5
Hill Tribes										
Large	0.0	0.4	2.7	30.0	2.0	1.3	3.3	22.4	0.9	63.0
Small	0.0	0.2	0.5	2.5	0.4	0.1	0.4	1.7	0.1	5.9
Lower Castes										
Large	0.0	0.4	1.0	10.0	0.8	0.0	2.0	4.5	0.0	18.7
Small	0.0	0.1	0.3	1.2	0.4	0.0	0.4	1.0	0.1	8.5
Other Castes										
Large	35.7	4.0	2.2	42.0	6.0	3.5	5.0	12.0	1.3	112.0
Small	0.0	0.3	1.5	7.0	0.8	0.4	3.0	5.0	0.3	18.3

Bullock carts are the main transport means and the number has increased in the area. They are used for transportation of crop produce, fertilizer, manure, paddy straw, thatching straw, and timbers (Table IX). About one-third of the carts were owned by large farmers with 45 percent belonging to

TABLE IX  
NUMBER OF BULLOCK CARTS BY CASTE AND  
FARM SIZE, 1989, KUMROJ PANCHAYAT

Caste	Large Farms	Small Farms	Total
Brahaman	7 (11.3)	21 (33.8)	28 (45.1)
Chhettri	4 (6.5)	4 (6.5)	8 (13.0)
Tharu	6 (9.7)	14 (22.6)	20 (32.3)
High Tribes	2 (3.2)	2 (3.2)	4 (6.4)
Lower Castes	0	0	0
Other Castes	1 (1.6)	1 (1.6)	2 (3.2)
Total	20 (32.3)	42 (67.7)	62 (100.0)

Figures in ( ) indicate percentage.

Source: Sample Survey.

Brahmans, 32 percent belonging to Tharus, and 13 percent belonging to Chhettris. Most carts remain busy in on-farm/off-farm work

## Production

### Crops

Crops are the main production activity in the area with livestock as the second most important activity. Fishery, forestry, ploughing and transport activities, agro-processing activities, cottage industries, and grass collecting activities are the other production activities.

Cropping systems include paddy, wheat, maize, mustard, and vegetables. On unirrigated land the alternative annual cropping rotations are the following:

paddy - wheat  
mustard -maize

On irrigated land the alternative cropping rotations are the following:

paddy - paddy - wheat  
paddy - mustard - maize  
paddy - lentil - maize  
paddy - vegetable - paddy

After the community irrigation project was completed, a large number of farmers shifted from traditional farming to improved farming. Cropping intensity increased (Table X) and also productivity. In the case of mustard, some farmers reported that increasing soil moisture tended to reduce crop productivity. Crop yields are shown in Table XI.

Paddy occupied almost the whole area in the summer. For the winter season, farmers chose between mustard, maize, and wheat. Rhinos, boars and deer from nearby forests damage crops. Crop diversification tends to attract the animals more than monoculture. To reduce this damage, monoculture is

TABLE X  
CROPPING INTENSITY BY CASTE AND FARM SIZE  
(1988/89), KUMROJ PANCHAYAT

Caste and Farm Size	Total Cultivated Land (Bigha)	Total Area Under					Cropping Intensity (%)
		Paddy (Bigha)	Maize (Bigha)	Mustard (Bigha)	Others (Bigha)	Total (Bigha)	
Brahman							
Large	200.0	190.0	140.0	166.0	36.0	532.0	266
Small	291.5	280.5	208.0	234.0	63.8	786.3	270
Chhettri							
Large	60.0	69.6	19.8	57.0	3.6	150.0	250
Small	126.1	122.5	98.8	115.0	5.6	341.9	271
Tharu							
Large	88.0	96.8	40.5	58.1	8.8	204.2	232
Small	238.8	236.0	124.2	155.2	52.5	567.9	238
High Tribes							
Large	10.0	11.3	6.7	9.3	0.3	27.6	276
Small	101.4	51.7	94.3	92.3	9.1	247.4	244
Lower Castes							
Large	2.5	1.5	2.5	2.5	0.15	6.00	262
Small	39.5	8.7	39.5	39.5	0.4	88.1	223
Other Castes							
Large	39.2	37.6	9.0	37.6	3.9	88.1	225
Small	22.2	21.5	20.0	20.0	1.1	62.6	282

$$\text{Cropping Intensity} = \frac{\text{Total Land Area Under Various Crops During a Year}}{\text{Total Cultivated Land Area}} \times 100$$

TABLE XI

PRODUCTIVITY OF VARIOUS CROPS BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, (1983/84-1988/89)

Caste and Farm Size	(quintal/Bigha)					
	Paddy		Maize		Mustard	
	1983/84*	1988/89**	1983/84*	1988/89**	1983/84*	1988/89**
Brahman-large	14.5	22.8	8.2	10.2	2.3	3.0
Brahman-small	13.2	24.4	7.3	12.5	2.1	3.2
Chhettri-large	16.7	21.3	6.5	9.0	1.5	2.8
Chhettri-small	12.7	21.6	5.2	8.3	2.2	2.7
Tharu-large	13.2	17.4	6.4	8.4	2.4	2.6
Tharu-small	13.0	17.0	5.0	7.6	1.4	2.5
Hill Tribes-large	13.3	21.0	7.2	9.5	2.6	2.8
Hill Tribes-small	10.3	16.4	2.9	6.2	1.3	2.2
Lower Caste-large	13.3	20.4	3.3	6.0	1.6	2.1
Lower Caste-small	13.3	15.0	3.2	6.0	1.4	2.0
Other Castes-large	14.0	18.2	7.5	9.4	1.6	2.6
Other Castes-small	15.4	19.4	7.9	8.2	2.3	2.9

\* Based on census survey (1983/84) done by SFDP

\*\* Based on Sample Survey, 1988/89

preferred during the winter cropping season. For similar reasons, farmers do not grow vegetables and fruits in the region even though such crops are suitable and have a good market.

At times, farmers have formed protection groups to chase away the rhinos and other wild animals. Public forest officials want to limit farmers in this activity because rhinos are protected by law. Even under these conditions, some farmers venture commercial level vegetable and fruit production and have reaped good benefits.

Maize was found to be the crop selected for monoculture during the study period. Wheat remained trivial. Hence minor crops such as wheat, lentil, vegetables, and fruits were considered as 'other crops' in this study.

### Livestock

Livestock is important in supplementing farm income and family nutrition. It utilizes crop by-products (such as straw), by-products from agro-processing (eg. rice bran, mustard cake), and grasses. However, large amounts of manpower are required for their care. Tharus have a tradition for grazing animals. In the villages, there are professional care takers who graze animals for pay. This appears less costly than using family members who have higher opportunity costs. Some of the migrant families have also become herdsmen. However, due to restrictions in the forest area and a sharp decline in traditional (public) grazing areas, animals may not be well fed by grazing and hence this activity is losing popularity.

Most of the hill migrants feed their animals at home. However, they take them out for a few hours every day for exercise, river bathing, and grazing.

Productivity of milch animals differs widely depending on type of animal (buffalo or cow), genetic quality, feed quality, and health care. Normally, buffalo yield more milk than cows and improved breeds yield more milk than native breeds. For cows, yield varies from 0.5 to 2.0 litre per day. For buffalo, it varies from 3 litre to 12 litres per day.

A trend of replacing native breed animals with improved breeds is underway. According to one estimate, over 150 thousand rupees worth of native breeds are exported annually and 250 to 300 thousand rupees worth of improved milch animals are imported annually into the region. About 5 to 6 thousand rupees are spent for artificial insemination services which are available from outside the region. Credit from the SFDP has encouraged this replacement process.

### Grass Collecting

Neither on-farm grazing nor crop by-products such as straw are adequate to meet the food requirements of the animals. Hence, each family has to send somebody everyday to collect grasses. Grass is available on public lands, river banks, road-side, in the fields, on cropland bunds, and in the forest. No tax or fee is paid except on the community forest area where a fee of Rs. 5 per month is assessed. No formal market exists for buying and selling of grasses in the region.

### Forestry

Four kinds of forest lands exist in the region: private, community, Tarai community, and government. The first three have led to new types of forestry activity in the region. Agro-forestry started during 1984/85 after the SFDP came

to the area. Community forest was established by local people in 1987 on 45 bighas of public land. The Tarai community forestry was established in 1988 by the Tarai Community Forest Development Project on 105 bighas of public land. It was meant for community use in the future.

The forestry department has completely banned use of the government forest for lumber and has restricted cutting of trees for firewood. However, they have opened the forest for 15 days each year for obtaining thatching straw (Khar), fencing straw (Khadai), and rope straw (Babiyo). The charge is Rs. 5 per person for 15 days. The quantity allowed to be harvested is unlimited. This provision is of great help to the people. The majority of houses and cattle shades in the region have thatched roofs which need to be replaced or repaired every 1-2 years. Some households have wooden, brick, or tin roofed houses and do not need the straw. The more wealthy households frequently send servants to do this task. About 50 percent of the households take part in this activity (for 10 days on average) sending 2-3 persons per family. They mostly belong to the small farmer groups. About sixty percent of the households are from the hill migrants and 40 percent from the Tharus. This period also keeps all the transport carts busy for about 4-5 days. This opportunity helps the marginal and landless families in that they harvest more grasses than they actually need and hence are able to sell the surplus. Roughly, each person collects about Rs. 50 worth of grass each day.

Rapti river is a large river and is a sanctuary for aquatic life including crocodiles. It flows between the national park (government forest) and the study region. During the rainy season (June - August), heavy floods occur bringing fallen trees and branches. Villagers collect these trees and branches for use as fuelwood and lumber.



It is also known that some people are illegally engaged in bringing lumber from the forest. It is estimated that Rs. 100,000 to Rs. 200,000 worth of lumber is brought into villages for use within the region or for export. The purpose of the private and community forest activities is to replace the need for lumber and fuelwood currently supplied through the government forest lands. Government forest officials are waiting for private and community forests to grow sufficiently to yield enough firewood to meet local demand. The plan is then to completely fence the government forest and electrify the fences. This should control smuggling of lumber and damage to crops by wild animals.

Community forestry should guarantee a sufficient supply of firewood and grasses in the short-run. The amount of lumber available for the future is substantial but has not been estimated at this time. A good future for forestry is expected, particularly as to the amount of private forest lands as shown in Table XII.

Afforestation activities are undertaken at private and community level. Private forestry (at the farm level) consists of scattered plantings (on land bunds) and plantings on small parcels of land. In general, private forestry is not important in terms of employment. Community forestry on the other hand, occupies a large land area and creates employment for small farmers and provides materials for their maintenance activities.

The important role of both private and community forestry is in terms of forage/grass output, firewood output, and timber growth which builds assets for the future. Most of the private forest consists of fast growing Delbergia Sisoo plants of high economic value. Community forests have a mixture of various types of trees and plants with various economic value (timber, firewood, and forage).

TABLE XII  
AGROFORESTRY (PRIVATE) BY CASTE AND  
FARM SIZE, KUMROJ PANCHAYAT,  
(1988/89)

	(Bigha)
Caste and Farm Size	Area
Brahman	
Large Farmer	4.0
Small Farmer	10.0
Chhettri	
Large Farmer	3.0
Small Farmer	4.0
Tharu	
Large Farmer	1.5
Small Farmer	4.8
Hill Tribes	
Large Farmer	0.3
Small Farmer	1.2
Lower Castes	
Large Farmer	0.1
Small Farmer	0.5
Other Castes	
Large Farmer	0.5
Small Farmer	2.7
Total	32.6

Source: CARE/N, field office (Parsa)

Sample Survey

An estimate of the value (net present value) was made for timber growth based on management practices and a maturity period of 20 years. Other by-products (such as grass and firewood) are consumed annually. Timber growth is assumed a saving which accumulates as capital formation over years. Table XIII indicates a large expected value of timber, forage, and firewood. Community forest was newly established and did not yield much firewood. Over the years, production of grass is expected to decline, production of firewood is expected to increase sharply, and timber growth will remain constant at its net present value rate. Given no further increases in area under community forest, the amount available after 20 years is quite significant and will take care of many community needs.

#### Ploughing and Transport

Like crop and livestock, ploughing and transport is a common activity of the households. Draft animals, bullock carts, ploughs, tractors, and trailers represent the capital investment. Output includes ploughing and transport services (PTS), manure, and animals sold. On-farm as well as off-farm use of PTS common. Sharing of services among neighbors and among people of the same caste is a common practice. However, hiring of services is also common, especially during peak ploughing and transport periods.

#### Agro-processing

There are five mills in the region for processing paddy, wheat, and maize. Two belong to the Brahmans and one belongs each to the Chhettri, Tharu, and Other Castes. All mill owners are large farmers. About 75 percent of the rice paddy, maize, and wheat is processed within the region. All of the mustard and

TABLE XIII  
USE OF PRIVATE AND COMMUNITY FOREST  
PRODUCTS BY CASTE AND FARM SIZE,  
KUMROJ PANCHAYAT, 1988

Caste/Farm Size	(Rs. 000)							
	Private Forest				Community Forest			
	Grass	Firewood	Timber Growth	Sub- Total	Grass	Firewood	Timber Growth	Sub- Total
Brahman-Large	6.0	8.0	37.0	51.0	20.0	0.2		20.2
Brahman-Small	15.0	20.0	92.0	127.0	65.0	0.6		65.6
Chhettri-Large	5.0	6.0	28.0	39.0	10.0	0.1		10.1
Chhettri-Small	6.0	8.0	37.0	51.0	27.0	0.2		27.2
Tharu-Large	2.0	3.0	14.0	19.0	3.0	0.1		3.1
Tharu-Small	7.0	10.0	44.0	61.0	75.0	0.6		75.6
Hill tribe-Large	0.5	0.6	3.0	4.1	0.8	0.2		1.0
Hill tribe-Small	2.0	2.5	11.0	15.5	41.0	0.4		41.4
Lower Castes-Large	0.1	0.2	1.0	1.3	0.4	0.05		0.45
Lower Castes-Small	0.7	1.0	5.0	6.7	14.0	0.15		14.15
Other Castes-Large	0.7	1.0	5.0	6.7	2.8	0.1		8.9
Other Castes-Small	4.0	5.0	25.0	34.0	5.0	0.2		5.2
Community	--	--	--	--	--	--	450	450.0
Total	49.0	65.3	302.0	416.3	264.0	2.9	450	716.9

25 percent of paddy, wheat, and maize are sent outside the region for processing.

### Fishery

Fisheries are gaining importance among farmers (Table XIV). There are 26 fish ponds (mostly private) in the region covering about 5.15 bighas. Rivers are also a good source of fish for the Tharus and 'Bote' (a hill tribe). It helps meet their own requirements and provides some income. Every year the local panchayat auctions the use of natural rivers for fish harvest. During the study period, the panchayat office received Rs. 6,000 from such auctions.

### Cottage Industries

Most of the cottage industries such as weaving, making of snacks (Dalmoth), cap making, and wool spinning were introduced into the region. Within a short-period, wool spinning failed because of marketing problems, but weaving and cap making continued under government financial support. Liquor manufacturing is a traditional activity produced mainly for home consumption but with a small amount sold.

### Regional Input and Output Prices

Seeds, fertilizers, manure, labor, and PTS were the main inputs for crop enterprises. Most seeds come from area households. Fertilizers are purchased (cash and credit) from cooperatives. Based on availability, farmers buy four types of fertilizers (complexal, urea, ammonium sulfate, and Murate of potash) with prices ranging from Rs. 225/Qtl. to Rs. 438/Qtl. An weighted average

TABLE XIV  
FISH POND AREA BY CAST AND FARM SIZE,  
KUMROJ PANCHAYAT, (1988/89)

Caste and Farm Size	Pond Area (Bigha)
Brahman	
Large	2.00
Small	0.25
Chhettri	
Large	1.00
Small	0.10
Tharu	
Large	0.80
Small	0.50
Hill Tribes	
Large	•
Small	•
Lower Castes	
Large	•
Small	•
Other Castes	
Large	0.50
Small	•
Total	5.15

(based on the quantity sold) equals about Rs. 400/Qtl. as the area fertilizer price.

There is a limited supply of manure in the region. Many farmers want to buy manure but there are only a few willing to sell. Quoted prices ranged from Rs 5.5/Qtl. to Rs 15/Qtl. However, for those who actually sold manure the reported price was closer to Rs. 5.5/Qtl.

Labor demand has increased by 25 to 30 percent over the last five years primarily because of increased intensification of cropping and the availability of irrigation. Increased labor supply from new immigrants compensated for the loss of 92 hill tribe households who migrated out after the 1984/85 devastating flood from the Rapti river. Increased demand for and reduced supply of labor resulted in heavy influx of imported (seasonal) labor from other districts. It is estimated that about 35 percent of summer (paddy) labor demand and 10-15 percent of winter (maize/mustard/wheat) demand was filled by imported labor. Prior to 1983, only about 10-15 percent of summer labor demand was met by importing workers. Importing labor has suppressed the local wage rate. A contractual wage rate for imported labor is about Rs. 15-20 per day whereas the daily wage for local labor is from Rs. 20-30 per day depending upon skills and level of demand. On average, Rs. 22.5 per day during the summer and Rs. 23.5 per day during the winter is an appropriate wage rate. Imported labor is used mainly by Brahmans, Chhettris, and Other Castes. Tharus, Hill Tribes, and Lower Caste households have a tendency to share or hire labor from among themselves. Most small farmers among the upper castes prefer sharing of labor and do not like to work as paid laborers because of social prestige attached with higher castes.

For livestock and draft animal maintenance, a significant part of the labor requirement is met from children. Children, 10 years or above, have time after

school and during weekends to care for animals. Child (youth) labor is considered to be 50 percent of an adult equivalent unit.

Land rent increased as productivity increased in the region. Eight Qtl. of paddy per bigha was the going market rental rate. This rate varies slightly as per the quality of the land. For share cropping, the practice is that land owners pay 50 percent of seed and fertilizer cost (plus providing the land) and share in 50 percent of the output. For computation of land rent in this study, this (latter) approach has been followed. Government taxes land owners at the rate of Rs 1/bigha if the owner has less than 1.5 bigha of land and Rs. 50/bigha (on average) if the owner has more than 1.5 bigha of land.

Output prices at the producer and area market (retail) level are presented in Table XV. Except mustard, the difference between farm gate and local market (Parsa, Narayanght) price level is not very wide. Mustard, a cash crop, shows an escalating price after harvest. At harvest time the mustard price is low because of its high moisture content. Later, the market price increases partly because there is loss of weight as the mustard grain loses moisture slowly. Secondly, dry mustard gives better quality oil than mustard with a high moisture content.

## Public Infrastructure and Institutions

### Roads

The study area is connected to the East-West highway with a five Km. gravelled road. This road crosses the Budhi Rapti river and limits transport to the study area for 3 to 4 months (rainy season) out of the year. Currently, farmers are building a permanent bridge over the river which would allow year-



TABLE XV  
COMMODITY PRICES AT PRODUCER AND AREA MARKET  
LEVEL (1988/89), KUMROJ PANCHAYAT

Commodity	Unit	Producer Level Price	Nine Month Average of Market Price
Paddy	Rs./Qtl.	425	--
Rice	Rs./Qtl.	634	816
Wheat	Rs./Qtl.	380	408
Maize	Rs./Qtl.	330	352
Maize Flour	Rs./Qtl.	382.5	--
Mustard	Rs./Qtl.	1130	1339
Mustard Oil	Rs./litre	34	40
Mustard Cake	Rs./Qtl.	100	--
Meat	Rs./Kg	50	50
Milk	Rs./litre	6.5	7.6
Paddy Straw	Rs./Qtl.	40	--
Maize Cobb/Straw	Rs./Qtl.	10	--
Mustard By-product	Rs./Qtl.	5	--
Rice Bran	Rs./Qtl.	150	--
Transport Rate	Rs./Qtl.	6	--

Source: Sample Survey. Agricultural Development office (1989). Agricultural Statistics Information Bulletin, Bharajpur (Chittown).

round access to markets. The village panchayat has good roads (mostly gravelled) connecting the hamlets.

### Markets, Communications, and Extension Service

Parsa and Ratna Nagar are the two nearest market centers located on the East-West highway at a distance of 5 and 9 Km., respectively, from the study region. Both towns have basic government services including agricultural extension sub-center, veterinary sub-center, health post, post office, high schools and college, well developed market and communication facilities, and transport services connected with all other market centers in the country. The government offices have regular visits of technicians scheduled to the study area. Also, farmers have free access to these offices at any time for technical information. Bharatpur (18 Km. northwest of study area on the East-West highway) is the district headquarters for government services. Attached to Bharatpur is the town of Narayanghat which is a large market center for the whole region. Highways from East, West, and North (linking Kathmandu, Pokhara, etc.) meet here.

A government milk collection center is located north of the study region at two Km. Because the government's milk and butter prices are lower than what farmers receive at local outlets, only a few farmers sell to this center (Table XVI). Most of the sellers are Brahmans and Chhettris.

There are six schools (two middle and four elementary) in the study area with 1,483 students in 1988/89. Students by caste are Brahman (42 percent), Chhettri (22 percent), Tharus (19 percent), Hill Tribes (10.5 percent), Lower Castes (4 percent), and Other Castes (2.5 percent). In addition, there is a village health worker and a family planning professional in the study region.

TABLE XVI  
MILK AND BUTTER DELIVERED TO THE MILK COLLECTION  
CENTER BY CASTE (1988/89), KUMROJ PANCHAYAT

Caste	Milk (Litres)	Butter (kg.)
Brahman	2974	160
Chhettri	392	90
Tharu	12	--
Hill Tribes	28	15
Lower Castes	--	--
Other Castes	40	45

Source: Milk Collection Center, Budauli.

### Financial Institutions

Commercial banks including Nepal Bank Limited (NBL), Rastriya Baniyya Bank (RBB), Agricultural Development Bank (ADB/N), and cooperatives operate in the Parsa bazar (at a five Km. distance from the region). Another cooperative is located at Buchhyauli (a village five Km. west of the study area).

The NBL at Parsa started its service in 1985. It has not extended agricultural loans to farmers in the study region except for one tractor to a

Brahman large farmer. However, NBL frequently makes short-term consumption loans. In 1988/89 about Rs. 1 million in 4 turnovers (based on gold and silver collateral) was loaned and about 0.9 million was recollected. According to the bank manager, large farmers borrowed mainly for relending purposes while small farmers borrowed for consumption purposes. The interest rate was 17 percent. The bank also received about Rs. 0.2 million as savings deposits from the region and paid 8.5 percent interest to the depositors. More wealthy households deposited less to the NBL than the medium wealthy (small farmers) households (Table XVII).

The Agricultural Development Bank (ADB/N), Bharatpur branch, extends agricultural loans to farmers in the region. A new sub-branch of ADB/N opened at Parsa in 1989. The study region is included within its operational area. During the survey period, records were being transferred from the Bharatpur branch to the Parsa sub-branch. Consequently, neither of the two offices could provide complete loan information for the Kumroj Panchayat. However, from information on outstanding and overdue loans and from discussions with bank officials, it appears that the ADB/N does not have major farm loan transactions in the region, especially after the SFDP, Kumroj was established (Table XVIII).

The study region fell under the operational jurisdiction area of the Bachhyauli cooperative. However, the cooperative has discontinued financing farmers because of serious delinquency problems and an unwillingness of borrowers to repay loans. The cooperative has been faced with a severe financial crisis and was forced to act only as a loan transaction agent. Loan delinquency by caste is shown in Table XIX. Interviews with people in the region revealed that some influential people intentionally did not repay loans and a majority of others followed suit. Interview information also indicated that it was less costly to divert loans from public agencies for specific purposes to

TABLE XVII  
LOAN OPERATION AND SAVINGS DEPOSIT IN NEPAL  
BANK LIMITED PARSA BY CASTE AND FARM  
SIZE (1988/89), KUMROJ PANCHAYAT

(RS 000)			
Caste and Farm Size	Loans		Savings Deposits (1987/88)
	Disbursement	Recollection	
Brahman			
Large	120	105	16
Small	215	198	37
Chhettri			
Large	100	92	16
Small	110	101	20
Tharu			
Large	60	54	18
Small	50	46	3
Hill Tribes			
Large	40	36	17
Small	40	34	3
Lower Castes			
Large	4	2	--
Small	10	8	--
Other Castes			
Large	50	45	50
Small	55	47	20
Total	854	768	200

Source: Nepal Bank Limited, Parsa  
Sample Survey

TABLE XVIII

LOANS OUTSTANDING WITH THE AGRICULTURAL  
DEVELOPMENT BANK OF NEPAL BY PURPOSE  
AND CASTE (1983/84-1988/89),  
KUMROJ PANCHAYAT

Purpose	(RS. 000)													
	1983/84							1988/89						
	B	C	T	HT	Lo	O	Total	B	C	T	HT	Lo	O	Total
Production	-.-	-.-	-.-	-.-	-.-	-.-	-.-	7.5	-.-	4.5	-.-	-.-	1.0	12.1
Mechanization	151.0	-.-	-.-	-.-	-.-	56.0	207.0	115.9	-.-	11.2	80.0	-.-	8.1	143.2
Pumpset	77.4	19.7	-.-	26.2	-.-	-.-	123.3	12.6	6.3	-.-	18.5	-.-	-.-	37.4
Well	6.9	5.2	-.-	4.5	-.-	-.-	16.6	11.1	-.-	-.-	2.5	-.-	-.-	13.6
Irrigation (Canal)	60.0	27.0	22.5	60.0	-.-	-.-	115.5	44.5	3.8	-.-	6.1	-.-	-.-	54.4
Poultry	6.0	-.-	-.-	-.-	-.-	-.-	60.0	-.-	-.-	-.-	-.-	-.-	-.-	-.-
Fishery	33.6	-.-	-.-	-.-	-.-	-.-	33.6	81.0	-.-	-.-	-.-	-.-	-.-	81.0
Livestock	-.-	3.0	-.-	-.-	-.-	-.-	3.0	-.-	-.-	60.0	-.-	-.-	-.-	60.0
Total	334.9	54.9	22.5	36.7	-	56.0	505.0	272.6	10.1	75.7	35.1	-	9.1	401.7

Source: ADB/N, Bharatpur  
ADB/N, Parsa

B = Brahman  
C = Chhettri  
T = Tharu  
HT = Hill Tribes  
Lo = Lower Castes  
O = Other Castes

TABLE XIX  
OUTSTANDING DELINQUENT LOANS WITH THE  
BACHHYOULI COOPERATIVE BY CASTE  
(1988/89), KUMROJ PANCHAYAT

Caste	(RS. 000)	
	Delinquent Loans Outstanding	
	Amount	Per Household
Brahman	89.9 (49.0)	0.4
Chhettri	51.6 (28.0)	0.5
Tharu	16.1 (9.0)	0.1
Hill Tribes	15.8 (8.5)	0.2
Lower Castes	5.9 (3.2)	0.1
Other Castes	4.5 (2.3)	0.1

Source: Cooperative at Bachhyouli

Figures in ( ) indicate percentage.

other uses than it was to borrow from private sources. Consequently, there has been frequent diversion of loans from intended purposes to other purposes such as building houses, buying land, reclaiming land, buying other assets, and consumption.

### Small Farmers Development Project (SFDP)

The SFDP\* started in December, 1983 with community irrigation projects as its priority. However, it has subsequently benefited small farmers in other socio-economic areas. Various studies (Bhattraï,1988; Maharjan, 1988; Dhakal, 1989; Bhattraï and Mool, 1988) have indicated that vast socio-economic changes occurred in the region over the last five years especially in crop productivity, livestock productivity, agro-forestry, literacy, health and sanitation, and labor skill formation. In part, these changes may be associated with the SFDP.

An overview of the performance of the SFDP in the Kumroj Panchayat over the last five years indicates that Brahmans and Chhettris were the major benefiting households. Out of a total of 345 members, 44, 21, 17, 7, 7, and 4 percent were Brahmans, Chhettris, Tharus, Hill Tribes, Lower Castes, and Other Castes, respectively. This represented 83, 89, 32, 23, 40, and 36 percent, respectively, of their (small farmer) population in the region in 1983/84. Also, of the landless 89, 75, 16, 24, 17, and 37 percent of Brahman, Chhettri, Tharus, Hill Tribes, Lower Castes, and Other Castes had joined the program (Table XX).

Out of Rs. 4,856,000 loan values disbursed during the 5 year period 1983/84 to 88/89, 68.7 percent went to Brahmans followed by Tharus (12.6 percent), Chhettri (10.5 percent), Lower Castes (4.5 percent), Hill Tribes

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\* Also called a sub-project office (SPO)



TABLE XX  
MEMBERS OF THE SMALL FARMERS DEVELOPMENT  
PROJECT (SFDP) BY CASTE AND FARM SIZE  
(OCTOBER, 1989), KUMROJ PANCHAYAT

(Rs. 000)					
Caste	Members			Total*	Percent Participation**
	LF	SF	LL		
Brahman	10	143	8	151	83
Chhettri	2	69	3	72	89
Tharu	1	50	11	61	32
Hill Tribes	--	18	6	24	23
Lower Castes	--	20	3	23	40
Other Castes	--	11	3	14	36
Total	13	311	34	345	100

Source: SFDP, Kumroj

\* Small Farmers and landless only.

LF = Large Farmer

SF = Small Farmer

\*\* Participants

$$\frac{(LF + SF + LL)}{\text{Total small farmers + LF (Households in 1983/84)}} \times 100$$

(2.3 percent), and Other Caste (1.4 percent). Per member and per household (1983/84 basis) loan disbursements also indicate a similar trend (Table XXI).

Some Tharu members were trained and encouraged to take up small scale wool spinning projects for a woolen factory in Narayanghat. In the beginning it worked well. Later, the factory did not honor the contract and the project ended in frustration.

The loans for other purposes included resettlement of some landless Tharu. Land was purchased and a house was constructed using SFDP loans. After resettlement, they were further provided production and livestock credit. This represented a milestone towards helping the rural poor.

Training is an important part of the SFDP for developing awareness and labor skills among members. Of the 175 members trained during the 1983/84 - 1988/89 period, 67 percent were Brahmans, 16 percent Tharus, and 9 percent Chhettris (Table XXII).

Group savings is another important program of the SFDP. Its purpose is to inculcate savings habits among small farmers. However, of the total 49 groups, only 14 groups participated in the savings programs. Total savings was Rs. 55,000 (Table XXIII). Per member savings was a maximum for the Tharus (Rs. 460) followed by the Hill Tribes (Rs. 450), and Lower Castes (Rs. 420). Brahmans and Chhettris have the minimum group saving in the SFDP.

There is no discrimination in loan interest rates by the ADB/N or SFDP. Large farmers borrowing from branch offices and small farmers borrowing from SFDP pay the same interest rate. Interest varied from 15 to 20 percent depending on purpose of loan (Table XXIV).

TABLE XXI  
LOAN DISBURSEMENTS OF THE KUMROJ SFDP, BY  
CASTE AND LOAN PURPOSE  
(1983/84 - 1988/89)

(Rs 000)											
Caste	Loan by Purpose								Loan		No of House -hold
	Crop	Livstk.	Irrn.	Mechn.	Cottage Indus	Horti	Other	Total	Per Members	Per House -hold	
Brahman	767	1666	395	331	81	48	50	3338 (68.7)	20.7	17.4	191
Chhettri	111	121	152	85	16	--	26	511 (10.5)	6.9	6.2	83
Tharu	126	76	80	99	114	--	115	610 (12.6)	9.8	3.2	189
Hill Tribes	21	41	32	15	5	--	--	114 (2.3)	4.7	1.1	102
Lower Castes	59	95	33	29	--	--	--	216 (4.5)	9.4	3.7	58
Other Castes	8	7	37	11	2	2	--	67 (1.4)	2.9	1.7	39
Total	1092	2006	729	570	218	50	191	4856 (100)			

Figures in ( ) indicate percentage.

\* based on 1983/84

Number of households differ from Table - I on the ground that 10 large Brahmans, 2 large Chhettris and one large Tharu (household) joined SFDP. These figures have been added to target (population) households of Table I.

TABLE XXII  
MEMBERS TRAINED UNDER THE KUMROJ SFDP BY SKILL  
AND CASTE (1983/84 - 1988/89), KUMROJ PANCHAYAT

Skill	Brahman	Chhettri	Tharu	Hill Tribes	Lower Castes	Other Castes	Total
1) Leadership	11		1		1		13
2) Group Dynamism	19	1	1		1		22
3) Savings and Record keeping	21	2	1	4			28
4) Adult Education	4	2	1				7
5) Veterinary	1						1
6) Forestry Nursery	3						3
7) Tailoring/Weaving	1		10	2			13
8) Vegetable Farming	39	5	2	1		1	48
9) Livestock Management	2	1				1	4
10) Irrigation Management	4						4
11) Masonship		1	2				3
13) Agricultural Leadership	7	1					8
14) Rural Communication	1		1			1	3
15) Agro-forestry	5	1					6
16) Sanitation			2				2
17) Health		2	8				10
Total	118 (67.5)	16 (9.1)	29 (16.6)	7 (4.0)	2 (1.1)	3 (1.7)	175 (100)
Per Member	0.8	0.2	0.3	0.3	0.1	0.1	0.5

Figures in ( ) indicate percentage

Source: SFDP, Kumroj  
Regional Training Center, Birendra Nagar.

TABLE XXIII  
GROUP SAVINGS IN KUMROJ SFDP BY  
CASTE (1983/84-1988/89)

Caste	No. of Savers	Amount Saved (Rs. 000)	Per Member Saving (Rs. 000)
Brahman	87	30 0	0 34
Chhettri	19	7 3	0 38
Tharu	25	11 6	0 46
Hill Tribes	2	0 9	0 45
Lower Castes	11	4 7	0 42
Other Castes	1	0 4	0 40
Total	145	54 9	0 36

Source SFDP, Kumroj

TABLE XXIV  
INTEREST RATE CHARGED BY ADB/N OR SFDP,  
BY PURPOSE (1988/89)

Purpose	Interest Rate (percent)
Production	16
Mechanization	18.5*
Irrigation	15
Livestock/Fish	18
Agro/Cottage Industry	15

Source: ADB/N

\* An average of interest rates charged for tractor loan and bullock cart loan.

### Private Financial Market

The private sector is an important source of credit for the region. Village money lenders and retailers are the main source followed by friends and relatives. There are money lenders in town who refinance other village money lenders at a 8-10 percent margin. There are also some stores in the towns belonging to the households from the study region that extend short term credit on merchandise.

There were about 60 money lenders in the area (Table XXV) of which Brahmans and Chhettris constituted one-half the number. Out of the total borrowing of Rs. 1,345,000 from private sources, 42 per cent came from outside the region. Brahmans and Chhettris were the major borrowers and in part this represented relending to others in the villages.

TABLE XXV  
PRIVATE MONEY LENDERS AND AMOUNTS LOANED  
AND BORROWED BY CASTE AND FARM SIZE  
(1988/89), KUMROJ PANCHAYAT

Caste and Farm Size	No. of Lenders	Amount Loaned (Rs 000)	Amount Borrowed (Rs 000)	Amount Repaid* (Rs 000)
Brahman-large	12	165	245	150
Brahman-small	8	180	390	200
Chhettri-large	6	81	93	50
Chhettri-small	4	45	130	38
Tharu-large	6	48	56	28
Tharu-small	5	30	169	29
Hill Tribes-large	3	45	18	20
Hill Tribes-small	4	34	87	18
Lower Castes-large	1	1	4	0
Lower Castes-small	3	4	45	1
Other Castes-large	3	40	23	45
Other Castes-small	5	68	85	25
TOTAL	60	741	1345	604

Source: Sample Survey, 1989

\* Principal Only.

During the 1983/84 period, 50 percent of the households borrowed, mainly for consumption purposes (Bhattraï, 1988). Interest rates varied from 36 to 100 percent a year.

In the 1988/89 period, the private financial sector was still important. However, the purposes for borrowing had changed. The majority of credit (especially by upper caste) was for investment in housing, land purchase, production inputs, and milch and draft animals (Table XXVI). Interest rates varied from 25 to 36 percent.

Most loan transactions occurred for short term and on a verbal contract. Long term loan transactions with formal contracts did occur using appropriate land mortgage instruments. However, further study is needed in this area. For example, in some cases, the borrowers surrendered the right of using their land to the lender. Such loans were interest free. Lenders used the borrowers' land until the loans were repaid. Such a practice tends to remove a major source of earning capacity from poor households.

Still another practice is for the borrower to mortgage gold and silver ornaments to the lender. If the borrower can not repay the principal and interest on the due date, the borrower forfeits those ornaments. The last two methods of lending/borrowing, however, did not exist on a wide scale. Lower interest rates in 1988/89 compared to 1983/84 came after an informal meeting of villagers whereby they decided not to have any credit transactions above 36 percent. It could also be due to increased funds available from institutional sources at lower interest rates or reduced consumer loan demand from poor households (perhaps due to increased incomes).



TABLE XXVI  
USE OF PRIVATE BORROWINGS BY PURPOSE, CASTE,  
AND FARM SIZE, 1988, KUMROJ PANCHAYAT

(Percent)								
Caste and Farm Size	Use of Private Borrowing							Total
	Con- sumption	Crop Prod- uction	Re- lending	Buy Land	Buy Ani- mals	Build House	Other Assets	
Brahman-large	12	1	35	10	5	25	12	100
Brahman-small	30	5	20	20	12	8	5	100
Chhettri-large	20	1	24	8	9	30	8	100
Chhettri-small	77	4	5	4	3	4	3	100
Tharu-large	39	2	5	20	5	29	10	100
Tharu-small	68	9	2	5	10	4	2	100
Hill Tribes-large	33	1	30	0	8	10	18	100
Hill Tribes-small	70	10	1	10	3	1	5	100
Lower Castes-large	100	0	0	0	0	0	0	100
Lower Castes-small	87	3	5	0	2	1	2	100
Other Castes-large	24	1	20	20	20	10	5	100
Other Castes-small	94	2	1	0	1	1	1	100

### Community Activities

The current political system has long recognized the importance of peoples participation in community level activities. However, participation differed depending on leadership. The SFDP was important in developing leadership and awareness among people. It encouraged them to use group concepts in improving community welfare. People have shown unprecedented achievements with only partial support from various government and non-

government agencies (e.g. ADB/N, SFDP, local panchayat office, CARE/Nepal, district panchayat office).

For different community level projects, people formed working committees and participation norms. They made project contributions in kind, by cash, and with labor. All the three types of contributions were substitutable. Generally, contribution amount was based on amount of land owned by a household but sometimes it was based on per household or made optional.

Peoples' participation made it possible to; i) create more schools than established by government quota; ii) convert dirt and problematic roads within the region to gravelled roads for year-round transport; iii) build a bridge costing Rs 0.35 million that crossed the Budhi Rapti river making year-round access to the Parsa bazar; iv) create two community irrigation projects costing Rs. 2.236 million<sup>9</sup> (675 bigha command area) which revolutionized the socio-economic status of people; and v) establish a 45 bigha community forestry.

Such community level projects required substantial capital and labor inputs. Poor households benefited immediately from the budget allocated for labor. Once the projects are completed, they have a maintenance budget which becomes supportive for some of the poor households for years to come. The projects have potential to produce immense long-term benefits to the community. Community forestry and irrigation projects are able to increase production worth many millions of rupees and generate thousands of additional man-days of employment. Roads, schools, etc. have many similar effects. Table XXVII indicate who contributed what for the different community level projects and Table XXVIII indicate who received the immediate benefits.

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<sup>9</sup> Forty-six percent technical grant, 29 percent cash contribution, and 25 percent cash and labor contribution by the people.

TABLE XXVII  
CONTRIBUTION TO COMMUNITY BY CASTE AND FARM  
SIZE (1988/89), KUMROJ PANCHAYAT

(Rs 000)

		CONTRIBUTORS													
Activities		Go/NGO	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	Total
1)	School	228.80	14.30	50.70	7.30	25.80	3.40	20.30	2.50	10.60	0.20	2.70	2.00	5.10	373.70
2)	Temple	-	1.40	1.30	0.40	0.40	0.20	0.20	0.10	0.10	-	0.10	0.10	0.10	4.40
3)	Road	21.00	19.10	21.90	2.50	7.70	7.80	19.60	1.20	9.10	0.20	4.50	7.00	3.50	125.10
	Transport	-	14.00	7.40	1.20	1.20	6.00	4.60	1.00	1.00	-	-	6.40	0.40	43.20
	Labor		2.10	10.00	0.50	5.80	1.40	15.00	0.10	8.10	0.20	4.50	0.20	2.80	50.70
	Cash for labor		2.00	4.50	0.80	0.70	0.40	-	0.10	-	-	-	0.40	0.30	9.20
	Culvert, etc.	21.00	1.0-	-	-	-	-	-	-	-	-	-	-	-	22.00
4)	Bridge	20.00	56.00	69.20	25.00	32.20	25.00	61.00	3.70	22.20	0.50	9.50	8.60	7.10	340.00
5)	Community forestry	18.00	4.25	11.50	2.10	6.30	2.90	7.10	1.25	7.85	0.23	1.92	0.25	1.05	64.70
	Labor		2.00	7.00	1.50	5.50	2.50	6.50	0.50	6.50	0.20	1.80	0.20	1.00	35.20
	Penalty		0.10	0.20		0.10	0.10	0.20	0.10	0.20					1.00
	User fee		0.15	0.30	0.10	0.20	0.10	0.20	0.05	0.15	0.01	0.04	0.05	0.05	1.40
	Capital Input	18.00													18.00
6)	Terai Comm. forestry	312.00													312.00
	Labor	142.00													142.00
	Materials	170.00													170.00
7)	Irrigation	7.15	14.50	24.60	8.00	11.10	7.70	16.60	1.20	5.10	0.15	0.75	2.60	2.50	101.95
	Labor	7.15	7.80	9.70	3.30	4.20	3.50	8.70	0.50	1.70	0.10	0.40	0.80	0.80	48.65
	Paddy		6.70	14.90	4.70	6.90	4.20	7.90	0.70	3.40	0.05	0.35	1.80	1.70	53.30
8)	Community Fish	6.00	--	--	--	--	--	--	--	--	--	--	--	--	6.00
9)	Land Rent	--	--	--	--	--	--	--	--	--	--	--	--	--	9.90
	Total	612.75	107.55	175.20	44.80	83.00	46.80	124.60	9.35	53.95	1.26	19.39	20.55	19.35	1328.60
	Percent	46.14	8.09	13.19	3.37	6.25	3.52	9.38	0.70	4.06	0.09	1.46	1.55	1.56	100.00
	Per Household		2.11	0.72	2.80	0.71	2.13	0.55	3.12	0.42	1.26	0.30	2.94	0.46	

TABLE XXVIII  
EXPENDITURE PATTERN OF COMMUNITY ACTIVITIES,  
KUMROJ PANCHAYAT (1988/89)

(Rs.000)

		RECIPIENTS																	
Activities		B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	Saving	TAS	CIPS	RON	Total	
1)	School*	50.5	60.0	30.0	35.0	11.0	22.2	--	15.9	1.0	10.0	34.0	--	--	16.0	34.0	50.0	369.6	
	Books Supply	0.4	1.33	0.1	0.7	0.1	0.7	0.05	0.4	0.02	0.18	0.02	0.1	--	--	--	--	4.1	
2)	Temple	--	1.5	--	--	--	--	--	--	--	--	--	--	--	--	--	2.9	4.4	
3)	Road	16.1	17.6	1.7	7.4	7.4	20.6	1.1	9.9	0.2	5.3	6.6	3.4	--	--	--	27.8	125.1	
	Transport	14.0	7.4	1.2	1.2	6	4.6	1.0	1.0	--	--	6.4	0.4	--	--	--	--	43.2	
	Labor	2.1	10.2	0.5	6.2	1.4	16.0	0.1	8.9	0.2	5.3	0.2	3.0	--	--	--	5.8	59.9	
4)	Bridge	--	2.5	--	1.8	0.7	14.0	--	7.0	--	4.0	--	--	90.0	--	--	220.0	340.0	
5)	Comm Forest																		
	From inputs	0.5	13.0	--	6.5	3.5	11.5	--	12.5	0.2	3.8	--	1.0	--	--	--	12.2	64.7	
6)	Terai Com For																		
	From Input	--	24.6	--	23.4	2.0	25.0	--	37.0	10.0	20.0	--	10.0	--	--	--	170.0	312.0	
7)	Irrigation labor	0.3	8.8	0.2	10.7	0.2	12.2	--	4.2	0.1	2.3	--	1.6	37.05	--	--	24.3	101.95	
8)	Others													6.8				6.8	
Total		67.8	129.33	32	85.5	24.9	106.2	1.15	86.9	1.52	45.58	40.62	16.1	133.85	16	34	507.2	1328.6	
Per Household		1.33	0.53	2.0	0.73	1.13	0.47	0.38	0.68	1.52	0.70	5.80	0.38						
Output (CF)																			
	Grass	10	30	2	7	1	35	0.5	20	0.2	8	13	2	--	--	--	--	117	
	Freward	0.2	0.6	0.1	0.2	0.1	0.6	0.2	0.4	0.05	0.15	0.1	0.2	--	--	--	--	3	
	Growing Timber	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	135**	
Output (TCF)																			
	Grass	10	35	8	20	2	40	0.3	21	0.2	6	15	3	--	--	--	--	147	
	Growing Timber	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	135**	

\* Salaries, wage, construction materials, stationaries, etc.

\*\* Accrue to community.

Comm = Community

CF = Community Forest

TCF = Terai Community Forest

Each activity receives funding from government/non-government organizations (GO/NGO) (external source) or households within the village system (internal source). Out of the total receipts of Rs. 1,328,600 for 1988, 46 percent came from external sources (GO/NGO) and 54 percent came from internal sources (households) (Table XXIX). Internal sources consisted of contributions from households in cash or in kind. About half of the external sources was meant for forestry development and about 40 percent came from the national government for operating the schools.

The funds collected were spent on construction materials, stationeries, or various other material inputs. All of these were imported from Rest-of-Nepal and equaled Rs. 513,000 (38.6 percent of the total expenditure). The remaining expenditures were mainly for in-kind labor contributions by households and thus were allocated to the Factor Account. A small amount of purchases were made directly from households.

Community functions play a very distinct role in income distribution. Most of the budget for schooling was spent on salaries for teachers who came from families represented by Brahman-large, Brahman-small, Chhettri-large, and Other Castes-large. rest of expended amount went to small farmers of Tharus, Hill Tribes, Lower Castes, and Other Castes as wage payment. Brahman-small, Chhettri-small, and all the large farmers had small shares in the rest of the expended amount. In all castes and farm sizes, (economically) better off farmers contributed the most and low-resource (landless/marginal) farmers received the most.

Apart from direct distribution of funds, the community built up assets in terms of human capital and non-human capital. Students attending school represent the human assets which are not valued in monetary terms. However,

TABLE XXIX  
RECEIPTS AND EXPENDITURES FOR COMMUNITY  
ACTIVITIES, KUMROJ PANCHAYAT, 1988

Source	Receipts (Rs. 000)	Source	Expenditures (Rs. 000)
Rest-of-Nepal Account GO/NGO	612.95	Rest-of-Nepal Account Materials	513.00
Institution Account		Factor Account	
Households		Labor	
Brahman-Large	107.50	Brahman-Large	67.80
Brahman-Small	175.20	Brahman-Small	129.33
Chhettri-Large	44.80	Chhettri-Large	32.00
Chhettri-Small	83.00	Chhettri-Small	85.50
Tharu-Large	46.80	Tharu-Large	24.90
Tharu-Small	124.60	Tharu-Small	106.20
Hill Tribes-Large	9.35	Hill Tribes-Large	1.15
Hill Tribes-Small	53.95	Hill Tribes-Small	86.90
Lower Castes-Large	1.26	Lower Castes-Large	1.52
Lower Castes-Small	19.39	Lower Castes-Small	45.58
Others Castes-Large	20.55	Other Castes-Large	40.62
Others Castes-Small	19.35	Other Castes-Small	16.10
Factor Account		Savings Account	128.00
Land Rent	9.90	Commodity Account	
		Materials and Services	50.00
Total Receipts	1328.60	Total Expenditures	1328.60

castewise distribution of the human capital formation indicates a skewness toward Chhettri, Brahman, and Hill Tribes (Table XXX).

Non-human assets include roads, school buildings, and a bridge for which valuation was not made in monetary terms. Roads and bridge had significant effect on marketing activities as they improved transport linkage between the study area and the nearby towns.

TABLE XXX  
NUMBER OF STUDENTS ATTENDING SCHOOL BY  
CASTE, KUMROJ PANCHAYAT, 1988

Caste	Children of All Ages	Children Attending School	Percent Attending
Brahman	1085	634	58
Chhettri	496	326	65
Tharu	979	279	28
Hill Tribes	312	150	48
Lower Castes	275	59	21
Other Castes	143	35	24
Total	3290	1483	45



### CHAPTER III

#### INCOME ANALYSIS OF THE RURAL POOR FOR KUMROJ PANCHAYAT

In this chapter, literature is reviewed and applied to the issues of income analysis of the rural poor. The following aspects are covered: 1) concept of small farmers and caste system; 2) labor, wages, and migration; 3) small farmer program evaluations including the Small Farmer Development Program (SFDP); 4) systems for village income analysis including social accounting methodology (SAM); and 5) application of a village system SAM to the Kumroj Panchayat.

#### The Rural Poor

Subedi (1986) identifies four kinds of rural poor: rural beggars, sufferers from natural disaster, landless or near landless laborers, and small farmers. The third and fourth categories of rural poor are of interest for this study. He identifies the third group as hill migrants who could not get land in the Tarai, permanent farm servants, bonded laborers, vegetable venders, porters, and tenants who mostly till other's land under contract or on a share cropping basis. Generally, both husband and wife work as laborers to earn sufficient income for the family. They generally do not have time to participate in social programs to improve family welfare.

## Small Farmers

Subedi identified two kinds of small farmers: a) Invisible small farmers - - those farmers belonging to lower castes or ethnic groups. These are marginal farmers that try to supplement their income from livestock activities, share cropping, and/or contractual tilling. They engage in off-farm work whenever possible. They tend to be ignorant of events beyond their neighborhood. b) Visible small farmers - - those farmers belonging to higher castes or ethnic groups. Their farms barely provide subsistence. They also try to supplement family income from livestock. Most of the farm work is done by women of the family. Men do not work off-farm because of social prestige attached with their castes. They generally sit idle around the village tea shops playing cards and drinking tea or liquor. They frequently interact with outsiders. They may have radios or bikes and are well aware of events going on around the world. They are in constant touch with local development officers. They attend public meetings and are able to speak of their problems.

Ken Kusterer (1989) reviewed about 268 Ph.D. dissertations on attitude and aspirations of small farmers and made some striking conclusions on this issue. He found that the word 'small farmer' and 'rural poor' are used interchangeably to convey the same message. A small farmer is an adult member of a small farm household. 'Small' refers neither to household size nor to land extension, but to the scale of economic activities (for income generation and capital accumulation). In other words, small means 'poor' or at least not rich or middle class. 'Farm' does not necessarily refer to a piece of independently worked land but refers to a household that is located in a rural setting and economically located in the agricultural sector. Thus, landed and

landless cease to be relevant. Almost all small farm households have access to at least some land (dwelling site) and almost no small farm household engages exclusively in farming its own land as its only economic activity.

One dissertation reviewed was about the SFDP in Nepal (Ashby, 1980). Recognizing 'lack of marketing infrastructure' as the single most important problem for farmers, it classified all farmers into four groups: 1) large commercial farms (one ha. or more and 50 percent or more of income from cash crop sales); 2) small commercial farm (less than one ha. and 50 percent or more of income from cash livestock sales); 3) part timer (33 percent or more income from off-farm activities); and 4) subsistence (little or no cash earnings).

Furthermore, this study identified five hierarchical goals that motivate economic behavior of small farmers which are: a) escaping from subordination to a higher status, e.g. from a tenant to a landlord; b) establishing a viable household economy; c) ensuring economic security for the lifetime of the household; d) accumulating enough domestic capital to establish the next generation of households; and e) ensuring increased standard of living to be carried to the next generation. He argued that small farmer households at levels (a) and (b) do not need credit to escape from poverty. They are too vulnerable to manage credit and repay the loan. They are in need of additional jobs, additional skills, and capital to generate additional income. Those small farmers at levels (c) or above do need credit to generate additional household income. However, as soon as they attain economic security, they cease to be small farmers.

Nepal Rastra Bank (NRB, 1988) defines small farmers on the basis of landholdings irrespective of income earning capacity. Accordingly, farmers with 8.2 bigha or more, 4.1 bigha to 8.2 bigha, 1.5 bigha to 4.1 bigha, and less than 1.5 bigha are classified as large, medium, small, and marginal farmer,

respectively. Based on basic income needs, it recognizes that families with per capita annual income below Rs. 2168.1 in the hills and mountains and below Rs. 1,719.5 in Tarai are under poverty.

The National Planning Commission (NPC) (1989) has defined per capita incomes of Rs. 1,971 as minimum basic needs income.

The Agricultural Development Bank (1986) has defined a small farmer as one who is depending on the profession of agriculture, cottage, and rural industries at the village level; whose landholding is small; who is actually a cultivator, tenant, sharecropper, fisherman, landless laborer, or laborer engaged in rural and cottage industries or other skill category; and whose annual net income does not exceed Rs. 1,200 (1985 prices) per capita for all family members.

There seem to be differing opinions on criteria for defining a small farmer including size of land holding, income, or poverty line. Each criterion has its own strengths and weaknesses. This study follows more the definition followed by the Agricultural Development Bank.

### Caste Systems

Caste type systems exist in one form or the other in all human societies because of differences in the functional relationship among members, division of labor, and rights and responsibilities of individuals. Each person is socially different from another in one way or the other regardless of how much people in a given society are proclaimed to be equal. Class (caste) appears if a group of people in a society have similar characteristics that are different than others. A summary of the class (caste) concept as used by Davis (1940), Warner et al. (1949), and Mayer (1955) indicates that individuals are of the same class

(caste) who have similar positions in the status hierarchy of a local community, who eat or drink together as a social ritual, who talk together intimately in a social clique, and who have access to marriage relationships outside the kinship group.

Regmi (1971) contends that economic power or wealth in Nepal is attained, in part, through ethnic connections within the framework of a caste system dominated by Hinduism. Dahal (1987) argues that the Nepali caste system, which is defined in terms of endogameity, has led to stratified caste hierarchical values. Preserving the present structure gives certain groups prestige and wealth. He concludes that these socio-cultural values may be associated with rural poverty in Nepal.

Pokhrel (1987) studied poverty problems in eastern Nepal and found that land holding varied with caste hierarchy. Farm income, wage income, and consumption expenditure was associated with caste hierarchy.

Sale of land to meet various needs is common. Transfer of land ownership changes the land distribution structure in society. Karki (1988) studied land distribution structural change over a five year period in rural Nepal. She found that one-third of households sampled had sold a part or all of their land. Common reasons of land sale were: repayment of loans, social expenditures, consumption expenditures, and asset build-up elsewhere. Incidence of land size deterioration was high among small landholders and ethnic (tribal) households.

#### Labor, Wages, and Migration

Sharma (1987) found that labor exchange is the dominant source for supplementing labor supply during peak periods of labor demand. Hiring of

labor to supplement family labor supply including long-term labor hiring prevailed mainly among the higher castes. He also found that wage levels were not sufficient to meet calorie needs of the laborer households and that the nominal wage rate had increased by 14 percent in Tarai but that the real wage rate had decreased by four percent during the same period. He concluded that ever decreasing real wage rate might be one indication of the growing poverty in Nepal.

Upadhyay et al. (1988) studied the adjustment of labor supply to the shift of labor demand in Nepal. They found inter-regional market adjustments in the form of permanent as well as seasonal migration of labor from unfavorable to favorable production areas and a tendency towards equalizing of wage rates. Consequently, there were no substantial differences in average wage rates between geographically separated production areas and hence income levels of wage earning households did not increase in favorable production areas even through new (modern) cultivation practices increased resource productivities and employment.

Dignan et al. (1989) made a detailed study on migration behavior of households of various castes in Nepal. They recognized migrant households as upper castes (Brahman, Chhettri), hill castes (Hill Tribes), trader castes (Lower Castes), and Other Castes (Newar, Jogi, Tharu etc.). They found that scarcity of land in the hills acted as a push factor and the prospect of acquiring more land in the Tarai acted as a pull factor for migration behavior. Using econometric models, they determined that membership of an upper caste had a strong independent effect on the probability of purchasing land. Caste influenced credit availability and credit arrangements for the purchase of land. They also found that the role of the caste system in maintaining social division and inequities continued at the destination (Tarai) as it was in the original place

(hill). Further, increasing population in the Tarai caused demand for land to shift upward increasing land prices and thereby increasing the importance of wealth in allocating land.

### Small Farmers Development Program Evaluations

Agricultural Projects Services Center or APROSC (1985) studied the effect of the SFDP from a sociological aspect and found that 'lower castes' tended to perform better if they formed small farmer groups along with farmers belonging to higher castes. There existed a direct relationship between group heterogeneity (by caste) and group dynamism.

Sah (1986) studied nine SFDP areas and found that of all small farmers, the main castes (all those other than tribal or lower castes) and the economically better off households (in each caste) participated more in the SFDP and derived more benefits than did the ethnic (tribal) and occupational (lower) caste households.

In another study, Sah (1984) found that in a SFDP area where the population is comprised of hill migrants and local (Tharus and non-Tharus) people, the former had higher participation rates and derived more benefits from the SFDP than the latter. However, Hill Tribes (of hill migrants) were no better off than local households in program participation and benefits derived. Both of the above studies found that the differential impact was partly due to inherent characteristics of target groups (that is innovativeness and receptivity by various castes) and partly due to management aspects (namely high coverage per worker) of the executing agency.

It is the dilemma with the SFDP that if coverage across all groups is preferred, the cost of the program increases significantly and the executing

agency loses resources. Unless this loss is made up by government transfers, financial institutions such as the ADB/N may not have the incentive to meet aspirations of the people and the attainment of national goals of the program (World Bank, 1989). This situation is further confirmed by Shah (1987) who found that under the credit activities, target groups benefited but lending institutions lost because they could not cover costs in the short-run.

Bhattraï and Mool (1988) made a before and after benefit-cost analysis of the two irrigation (community level) projects undertaken in the study area. With a project cost of \$683 and \$229 per hectare, the benefit-cost ratios, based on post study data, were found to be 4:1 and 3.3:1, respectively.

Bhattraï (1988) compared the before and after conditions of the beneficiaries in terms of the effects of irrigation projects (Appendix Table B-1). He found that there was a 472 percent increase in the households with surplus food production, 36 percent decline in the households which were at the breakeven level of food supplies, 80 percent decline in the households whose earnings supported only 6-9 months of food supplies, and 15 percent decline in the households which could manage only up to six months of food supplies.

Both of these studies are partial in nature, focussing only on the land based impact. Though they show a remarkable improvement in village conditions, they fail to show the income distribution as to who got what.

### Need of a System for Village Income Analysis

There are two important components to the analysis of income distribution. First, 'size distribution' focuses on magnitude of resource ownership per household and the resulting income distribution. Second, 'functional' distribution focuses on the efficiency of use of the factors of production (Bigsten,



1983; Bronfenbrenner, 1972). Hence, resource ownership and productivity of resources determines the income distribution. Because poor households have abundant labor resources, any increase in labor use or labor efficiency would decrease income inequality. However, because cross-country studies have indicated a slowness in bringing about more equitable distributions of income, more direct methods have incorporated equity issues into economic analysis (Squire and Van der Tak, 1975). These methods value marginal incomes received by lower income groups socially higher than marginal incomes received by higher income groups.

### Social Accounting Methodology

A social accounting matrix (SAM) provides a framework to reconcile 'size distribution' and 'functional distribution' (Pyatt and round, 1985) in a village income analysis showing who contributes what and who benefits by how much.

A SAM is a snapshot description of an economy representing the full circular flow of commodities and money (Figure 6) for a given time period, i.e., base year. It provides consistent information on the workings of an economy by organizing flow of money from production sector to factor income generation, from factor income to institutional income, from institutional income to commodity demand and saving, and finally from consumption and saving to production and investment. In SAM, each actor (production, factor, household, etc.) of the economy is assigned a row and a column. Rows record all receipts, and columns record all expenditures.

A SAM includes three different types of flows. First, market transactions result in nominal payments flowing from one actor (column) to another (row) across a market. A real flow crosses the market in the opposite direction, i.e.,

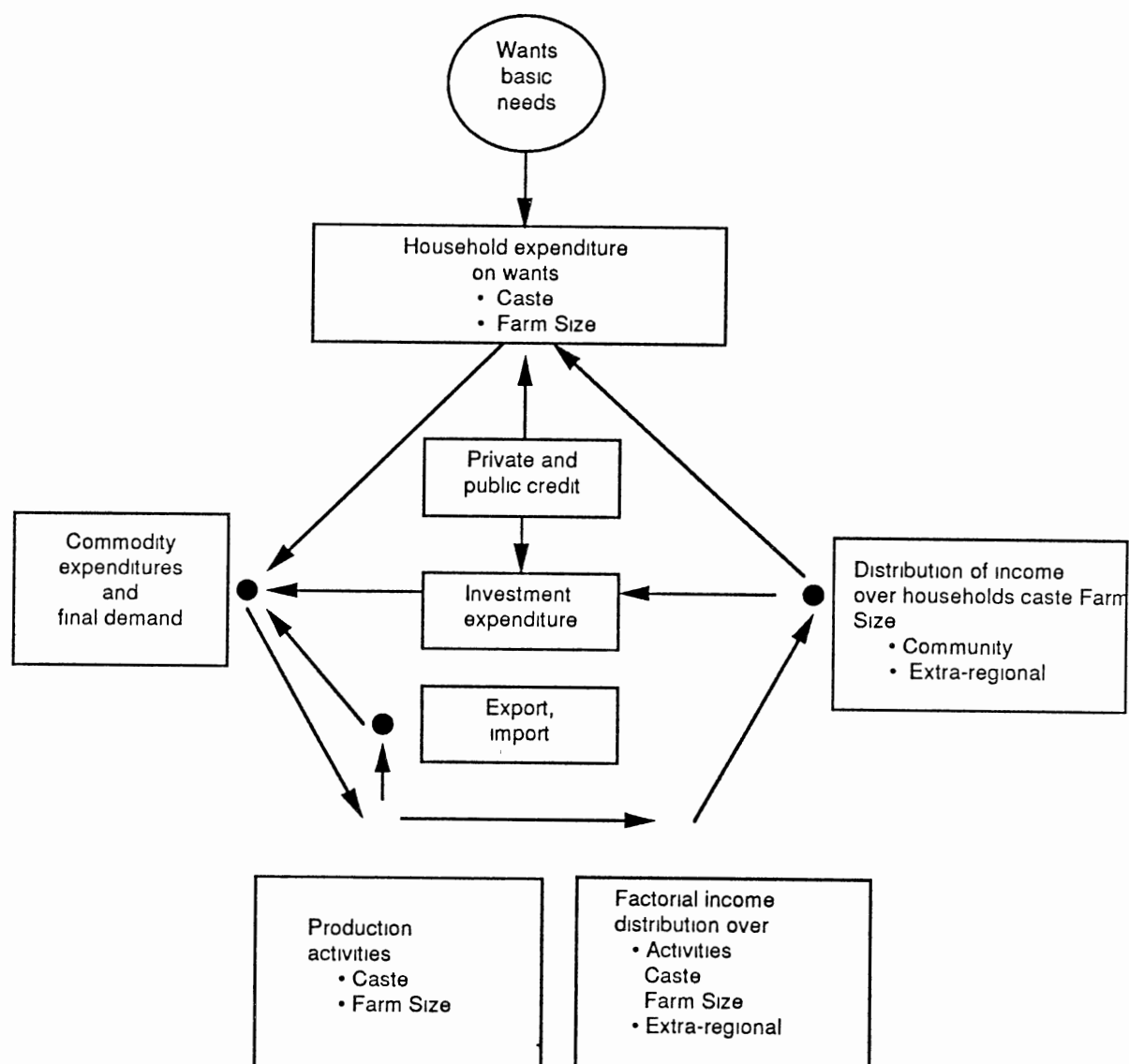


Figure 6. Circular Flow of a Village Economy.

Source: Based on Erik Thorbecke, (1985). The Social Accounting Matrix and Consistency-Type Planning Models in Pyatt and Round (Ed.) Social Accounting Matrices: A Basis for Planning. Washington, D.C. The World Bank.

from a row to a column. Second, financial flows reflect the workings of asset markets. Corresponding to the nominal flows, the purchasing account receives ownership of an asset. Entries in the capital account row are of this type. They also reflect the institutional structure of the economy. Rows of the financial accounts indicate source of 'loanable funds market' provided by savers (domestic or foreign). These funds are used either for income formation (through consumption loans) or capital formation. Finally, all remaining entries represent pure transfers, either voluntary or involuntary. Nothing goes from the row account to the column account in response to the nominal flow from column to row. Household tax payments and government transfer payments are examples (Robinson, et. al. (1990); Robinson and Ronald-Holst (1987)).

Originally, the SAM methodology was used for studying national level economic flows in highly aggregated form. Areas of application included tax policy, trade policy, income distribution, and food policy . More recently, the SAM methodology has been used to better understand village level economies where there is significant interdependence in resource ownership and commodity and factor markets.

Adelman, et al. (1987) constructed a SAM for a Mexican village. They concluded that a village is not a self contained economic entity but included a significant amount of external trade and remittances. Their policy experiments revealed the vulnerability of landless households to external shocks. Relatively small trickle down effects occurred from several productivity and income policies. They suffered the most from the cut backs and benefited the least from expansionary policies not directly targeted at them. A targeted policy had very high production and income multiplier effects leading to greater poverty reduction and more equalitarian distributional effects. Such policies included employment generating programs that increased the demand for hired labor

and provided facilities for higher levels of education in the village. They contended that there was much to be learned about how economic development works from a grassroot village perspective by constructing and analyzing a village level SAM.

Subramanian (1988) constructed a village level SAM for India to analyze structural linkages in a village economy and to determine village level effects of such changes as increased irrigation, limited mechanization, intensified agricultural production, and interlinking of share cropping and credit. He incorporated supply constrained activities thus circumventing the standard assumption of SAM's that agricultural output is only demand determined. Using fixed price multiplier decomposition and structural path analysis, he found that wage labor is the mainstay of landless and small and medium size farmers. Hence, he concluded that any relief program giving jobs to these households can effectively stabilize the poor's income. Secondly, investment in irrigation was effective in boosting output and incomes due to its high rate of return and strong multiplier effect. Thirdly, investment in milk production had a high rate of return but led to greater inequality because of the small share of landless households involved. Fourthly, landlords were able to keep rents high and tenants at low income levels unless there was state intervention through wage rate controls and organized credit markets.

Very often financial accounts are considered to be exogenous on the grounds that they rarely provide insight into how production, level of income, and other real economic variables would be affected if the financial flows had evolved differently. Roe (1985) recognizes that lack of consistent theory to show linkage among these sectors is the cause. He used case studies of Botswana, and central Bank of India to infer that use of flow of funds could be used for financial planning by estimating marginal portfolio coefficients based

on time trend as well as based on coefficients constructed from SAM. He further argues that in spite of usefulness of the flow of funds, data problems are severe. He recommends flow of funds include the following: i) sectoral savings that include capital gains/losses of each sector, ii) real investment that includes second hand purchases/sales of each sector; and iii) capturing role of formal and informal markets, transaction costs involved in lending and borrowing, and risk faced by lenders and borrowers.

Robinson and Roland-Holst (1987) argue that financial flows, though not a part of the productive sphere, reflect the institutional structure of the economy. They indicate source of savings and represent the loanable funds market. In their model on 'structural adjustment in the U.S. Economy', investment is endogenously determined as savings driven. Whatever is saved must be spent on investment goods. Ignoring macro-linkages that work through saving-investment mechanisms causes a loss of about one third of the multiplier effect of an exogenous increase in demand on both average sectoral demand and household income. They also find much variation (in multipliers) among sectors and household types due to differences in saving rates between sectors and households (rich saving more than poor).

Both of the above studies deal with financial aspects of a SAM from a macro (national) level perspective. Though lack of theory relating saving/investment (especially under borrowing) -production-consumption prevails, nevertheless, differences in savings by household because of varying propensities to save may show direction of future income formation.

### Fixed Price Multiplier Analysis

In the model for small and open economies, factor supplies for a demand driven model and commodity demands for a supply driven model are assumed perfectly elastic. In such situations, a fixed price multiplier analysis is followed. To obtain the multipliers, the procedure is to partition the SAM into a set of endogenous accounts and a set of exogenous accounts (e.g. exports, government, financial accounts). Linear relationships are assumed for linking various components in the accounts, such as input-output coefficients relating production activities to commodity and factor inputs and household expenditure coefficients linking institutional incomes to commodity and import demands. These relationships are assumed to be constant and hence an external shock to the system, such as a change in exports, is related directly and indirectly to changes in activity output, commodity and factor inputs, institutional incomes, and again to commodity and import demands. Upon completion of the circular flows in the village economy, the effects are measured by a set of direct and indirect or interdependence coefficients.

Fixed price multiplier analysis under certain conditions may be assumed to work equally well in the case of non-traded goods. For example, prices of services such as tailoring and hair cutting, which are heavily dependent upon labor, may be assumed to be determined exogenously because any increase in internal price from the multiplier effect of an external shock will be short-lived since the supply of labor outside the village will replenish the labor shortage within the village.

## The Kumroj Panchayat Village System SAM

### Activity Account

A schematic of the Kumroj Panchayat village system SAM is presented in Figure 7. The intermediate inputs (Use Matrix) for the village economy (entry 2, 1) consists of inputs from 27 commodity groups. The activities are grouped by cropping system<sup>1</sup> (crop); livestock (meat and milch animals); fishery-private (fish-p); fishery-community level (fish-c); private forestry (frst-p); use of community forest (CFU); use of Tarai community forest (TCFU); use of government forest (GFU); rice mill (mill); plowing and transport activity (PATA); trade and services such as tailoring, haircutting, retail shops, tea stalls, and liquor shops (TAS); grass collection activity (GCA); cottage industries e.g., weaving, carpentry, and liquor making (CI); use of services of mills located outside the region (mill-extl); and other services<sup>2</sup>. Each household of each caste and farm size was engaged in one or more of the 15 activity groups. Combining all 12 types of households, a total of 127 activities make up the Activity Account.

In addition to the intermediate inputs, activities employed inputs from the Factor Account (3,1) and imported inputs such as fertilizer from the Rest-of-Nepal Account. (6,1)

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<sup>1</sup> Aggregation of the four crops: paddy, maize, mustard, and all others.

<sup>2</sup> Includes maintenance, social expenses and (imported) non-food.

	5 Financial									
	(1) Activity	(2) Commodity	(3) Factor	(4) Institution	(5.1) Loan Receipt	(5.2) Loan Repayment	(5.3) Wealth	(5.4) Saving	(6) Rest-of- Nepal	(7) Total Receipts
1 Activity		Make matrix								Total output
2 Commodity	Use matrix			Consumption demand				Demand for investment goods	Commodity exports	Total commodity demand
3 Factor	Value added matrix			Payment for labor use				Factor use in capital formation	Factor payment inflow	Total factor income
4 Institution			Factor payments	Inter-institution transfers	Consumption loans	Distribution of interest			Income inflow	Total institutional income
5.1 Loan Receipt							Internal loanable funds		External loanable funds	Total loanable funds
5.2 Loan Repayment				Repayment of loans and interest						Total loan repayments
5.3 Wealth						Distribution of principal		Internal net change in wealth		Total replenishment of wealth
5.4 Savings				Institutional saving	Investible funds					Total savings
6 Rest-of-Nepal	Import of inputs	Commodity imports	Factor payment outflow	Income outflow		Loan repayment outflow		Saving (including net change in wealth)		Total financial outflow
7 Total Expenditures	Total outlay	Total commodity supply	Total factor expenditure	Total institutional expenditure	Total borrowing	Total distribution of loan repayments	Total loanable funds from wealth	Use of total savings	Total financial inflow	

Figure 7. Structure of the Kumroj Panchayat Village System SAM



### Commodity Account

The activities produced 27 products for the Commodity Account (1,2) which is also called the Make Matrix. In addition to the Make Matrix, commodity supplies are supplemented by imports (6,2).

Commodity demands include intermediate inputs (2,1), consumption demand (2,4), investment demand (2, 5.4), and exports (2,6). Because the Kumroj Panchayat is not self-sufficient, some households purchase commodities produced outside the village system (6,2) and produce commodities for sale (export) outside the village system (2,6).

### Factor Account

Land, labor, and capital are the factors of production. Factors receive payment from activities (3, 1); households (3, 4); investment (3, 5.4) as factor payments in the process of capital formation; and payment for factors used outside the village system (3, 6). The Factor Account distributes payments to households (4, 3) and to factors employed from outside the village system (6, 3).

### Institution Account

Households received factor payments (4, 3), inter-institution transfers (4, 4), and transfers (4, 6) from the rest of Nepal (e.g., business transfers, pensions, interest from savings deposited in banks). In addition, incomes are supplemented by borrowing for consumption (4, 5.1) and interest receipts from loan repayments (4, 5.2). Community is included in the Institution Account and receives payments from households (4,4) and from the government of Nepal (4, 6) for various activities such as schools, health facilities, and from auctioning the

right of using rivers and streams for fishing. Total institution income is represented in (4, 7).

Households spend their income on commodities produced within the village system economy (2, 4); on labor for various household uses (3, 4); on gifts to Lower Caste (small) households and community activities (4, 4); on repayment of loans and interest (5.2, 4); on savings (5.4, 4); and on payment of land tax, mill tax, and transfers to friends and relatives living outside the village system (6, 4). Community spends its receipts on labor (3, 4) (e.g., school teachers, other laborers, watchmen for community forest, etc.) and on imports of construction materials, stationeries, and labor (6,4).

### Financial Account

The credit component of the Financial Account includes loan receipts from private and public institutions and loan repayments including principal and interest. Loan receipts (loanable funds) are received from wealth within the village system, and the government<sup>1</sup> outside the village system (5.1, 6). The loan funds are distributed to households for supplementing their income (4, 5.1) and to the Savings Account (5.4, 5.1) for augmenting investment. Loan repayment as principal and interest is received from households (5.2, 4). Loan repayments are distributed to households as interest (4, 5.2) and to wealth as principal (5.3, 5.2). Loan repayments are also distributed to banks and individuals outside the village system as interest and principal payments (6, 5.2). The Wealth Account was created to act as an intermediary for private money lenders within the village system. The amount of loanable funds coming

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<sup>1</sup> Various banks and Small Farmer Development Project, Kumroj.

from the Wealth Account for the current period is (5.1, 5.3). Replenishments to the Wealth Account (5.3, 5.4) include principal repayments from current and past loans (5.3, 5.2). To the extent that principal repayments (5.3, 5.2) exceed or fall short of current loanable funds (5.1, 5.3), the difference is assumed to come from current savings and thus is an allocation from saving/investment (5.3, 5.4) and shows as an internal net change in wealth. Hence, this amount (5.3, 5.4) can be either negative or positive.

The Savings Account shows receipts from institutional saving (5.4, 4) and investable funds from the Loan Receipt Account (5.4, 5.1). Savings is expended as demand for investment goods (2, 5.4) for capital formation, factor payments in capital formation (3, 5.4), internal net change in wealth (5.3, 5.4), and financial outflow (6, 5.4).

#### Rest-of-Nepal (RON) Account

This account shows the transactions the Kumroj Panchayat village system has with the rest of Nepal. The column total for the RON shows the total financial inflows to the village system and includes payment for commodity exports (2, 6), factor payment inflows (3,6), income inflows (4,6), and loanable funds (5.1, 6). The row total for the RON shows the total financial outflows from the village system and includes imports of material inputs (6,1), commodity imports (6,2), factor payment outflows (6,3), income outflows (6, 4), loan repayment outflows (6, 5.2), and savings outflow (6, 5.4).

The entry at (6, 5.4) includes the difference between current loanable funds (5.1, 6) coming from outside and the amount of principal repayments from current and past loans (part of 6, 5.2). This amount is equal to the net change in wealth from outside the village system and can be either positive or negative.

## CHAPTER IV

### THE SOCIAL ACCOUNTING MATRIX (SAM) FOR THE KUMROJ PANCHAYAT

The purpose of this chapter is to discuss data collection methods and to use the data to construct the village level SAM for the Kumroj Panchayat. An aggregated SAM is presented for the Kumroj Panchayat and then the individual accounts are presented and discussed. Analysis of income distribution using the SAM is presented in the following chapter.

#### Data and Data Sources

The Small Farmer Development Project, Kumroj provided the population list of large and small farmers based on benchmark (census) survey data for 1983/84. This list was used to randomly select 150 farmers distributed proportionally over caste and farm size within each caste.

A survey was administered by the author to the sample of households obtaining 1988 data on production, commodity prices, consumption, resource use, input costs, credit, income transfers, etc. Community level information and other secondary data were collected from key informants in the village, and from government and non-government organizations.

The typical household was simultaneously involved in an array of production, consumption, trade, and other activities. It undertakes many production activities defined by sector. Very often output of one sector is used

as an input for another sector. Input-mix, therefore, heavily depends on what and how much (variable input) resource was owned by the household. Because input ownership and managerial quality differed from caste to caste and by farm size, enterprise budgets for each production activity were prepared for each caste and each farm size. Because of different income levels and variations in consumption patterns, household budget expenditures were also prepared separately for each household type. Detailed enterprise and household budget data are given in Appendix Tables B-2 to B-21. Enterprise budgets and household expenditures published by the government were also available and were used for comparison and supplemental purposes in checking the survey data.

Enterprise budgets for agroforestry represent a mix of new plantations as well as the old plantations. The agroforestry enterprise generates firewood, grasses for forage, and timber growth. Because tree growth is not of sufficient age and size for current timber consumption, timber growth is valued and allocated to capital formation in the savings/investment account.

Homogeneity in product and input factor markets was generally assumed to prevail at the Kumroj Panchayat level and thus one market price was established. However, this assumption was relaxed for the labor and land markets. Three marginally different wage rates (between Rs. 22.5 to Rs. 23.5 per man day) were used to distinguish slight seasonal variations. All local intermediate inputs (feed and seed) were priced at the (farm gate) output price level. All seeds came from within the panchayat with only a small amount of imports. Purchased material inputs from outside the panchayat were valued at prices paid. Transport services and trade were estimated for the activity in aggregate and included as cost of production

Power for ploughing and land preparation was computed on an index basis where a tractor hour was considered equivalent to five bullock power man-days. This equivalence was based on the observed price ratio between tractor and bullock power. This also became the imputed value for bullock power provided on-farm by owner-operators.

Variation in land markets was based on assumed quality differences as reflected by productivities. The observed land rent for share cropping was based on landowners receiving one-half of the crop value and sharing in one-half of the purchased material inputs including seeds, fertilizers, other chemicals, and miscellaneous items. Even though share cropping was not observed for all castes and all farm sizes, this computed value was used as an imputed value for land rent in all cropping activities.

Return to capital was computed as a residual after allocating returns to all other resources used either through valuing resource use at market price (cost) or imputed value. This does not allow for capital depreciation nor unused or underutilized capital items. Variation in quality of management as reflected by greater returns to capital may be interpreted as a return to human capital. Returns to capital by activity, caste, and farm size are presented in Appendix B.

The financial markets were highly segmented. Interest rates differed by source of credit (private vs. public) and use (purpose) of credit. However, because the financial account is constructed and used to show more the flow of funds in the current period rather than how credit was used in the past to change capacity or wealth, the credit market has essentially been disaggregated only between private and public sources. Information on credit and its uses was available from the sample survey and the financial institutions. Two uses of credit are identified: production (including investment) and consumption. Consumption loans entered the Institution (household) Account

as supplementing current income while investment loans entered through the Saving Account. For the private money markets, purpose of loan and loan period were not always known. Hence, loans were assumed to be short-term with a turn over of 9 months. Local money lenders borrowed from external private sources and received commission for refinancing. The margin appears as capital gain distribution in the interest (column) account. For public loans, short-term loans were either for crop production or consumption purposes. Both were to be repaid within a year with a 4 to 9 month turn over. Principal repayment was computed with an adjustment for loan delinquency rate as per information from the banks. For longer term loans, it was assumed that repayment was based on the previous year's loans outstanding. Depending on nature of longer term loans, one-fourth to one-third of previous year's outstanding amount was assumed to be repaid.

For information on community and social activities, key contacts were the following: head masters for schools and members of user/construction/-maintenance committees for roads, bridges, irrigation projects, and community forests. Information was supplemented from offices such as the national forestry office, CARE/Nepal, milk collection center, agricultural development office, and local village government (Panchayat office).

In summary, most of the data came from the sample survey, banks and other institutions, and key contacts.

### The Aggregate SAM for Kumroj Panchayat

The most detailed SAM for the Kumroj Panchayat contains 216 rows and columns. The production activities alone form about 35 percent of the matrix. The detailed row and column identification by account is presented in

Appendix D and complete SAM is presented in Appendix D-1. However, various accounts are presented here under in some detail with the discussion. The aggregate SAM for Kumroj Panchayat is presented in Table XXXI and is a counterpart of the schematic SAM presented in Chapter III.

The Activity Account shows that the villages in the Kumroj Panchayat produced commodities (goods and services) worth Rs. 39,177,150 (entry 1,2). To produce this amount, Rs. 13,439,900 worth of village produced (intermediate) goods and services (entry 2,1), Rs. 5,422,540 thousand worth of imported material inputs (entry 6.1) and Rs. 20,314,710 thousand (entry 3.1) worth of factor inputs were used.

The Commodity Account shows village output of Rs. 39,177,150 and commodity imports of Rs. 3,561,350 for a total commodity supply of Rs. 42,738,500. The accounting convention used in this study is to show imported material inputs as an Activity Account expenditure (Rs. 5,422,540) and imported equipment and materials for capital formation as a Financial Account expenditure (see Table XXXVI) but imported consumer (household) expenditures as a Commodity Account expenditure. Commodity demand includes intermediate input demand (Rs. 13,439,900), institution demand (Rs. 16,165,400), capital formation demand (Rs. 455,400), and export demand (Rs. 12,677,800).

The Factor Account received Rs. 21,263,910 as payments for land, labor, and capital from the production activities, households, capital formation, and rest-of-Nepal. Factor payments were distributed to households in the Institution Account (entry 4, 3) and to the Rest-of-Nepal Account for factors owned outside of the village system (entry 6,3).

Village households received Rs. 20,650,610 from the Factor Account as returns to resources controlled by them for a per capita factor income in the



TABLE XXXI  
AGGREGATE SAM FOR KUMROJ PANCHAYAT,  
1988

(Rs. 000)

(Rs. 000)											
Expenditure											
	Activity	Commodity	Factor	Institution	Loan Receipt	Loan Repayment	Wealth	Invest-Ment	RON	Total	
1	Activity		39177 15								39177 15
2	Commodity	13439 9		16165 40			455 40	12677 80		42738 50	
3	Factor	20314 71		631 20	28 50		25 00	264 50		21263 91	
4	Institution		20650 61	711 75	1131 00	253 10		789 55		23536 01	
5 1	Loan Receipt						1345 00	1530 00		2875 00	
5 2	Loan Repayment			2810 20						2810 20	
5 3	Wealth					604 00				604 00	
5 4	Savings			2602 53	1744 00		-741	-531 00		3074 53	
6	Rest-of-Nepal	5422 54	3561 35	613 3	614.93	1924 60		2594 13		14730 85	
TOTAL		39177 15	42738.50	21263 91	23536 01	2875 00	2810 20	604 00	3074.53	14730 85	150810 20

study area of about Rs. 3,104 (U.S. \$ 107) for 1988. This indicates that the study area received a higher earned income per capita than the national rural income\* of Rs. 2,456 (Nepal Rastra Bank, 1988).

The Institution Account received income from factor account and other sources including inter-household and government transfers, consumer loan receipts and interest payments, and other remittances. Including inter-institutional transfers, total institutional income was Rs. 23,536,010 of which about 5.6 percent belonged to community activities. Institution expenditures included 68.7 percent of their income on commodities (entry 2,4); 2.7 percent on labor payments (entry 3,4); 23 percent on loan repayments including interest and principal and savings; and 2.6 percent was remitted out of the Panchayat as tax payments to government, community expenditures, and other remittances (entry 6,4).

The Financial Account includes receipts from loan repayments and savings from the Institution Account; loan receipts and wealth replenishment from the Financial Account; and loan receipts from the Rest-of-Nepal Account. Expenditures of the Financial Account include capital formation, distributions of loan receipts and repayments, and financial outflows from the village system. Additional detail of the Financial Account is given in a later section.

The Rest-of-Nepal Account presents the aggregate trade and balance of payment between the study area and the Rest-of-Nepal. Receipts of the Rest-of-Nepal Account include material (entry 6,1) and commodity (entry 6,2) imports, factor payment outflows (entry 6,3), institutional income outflows (entry 6,4), and financial outflows (entry 6,5). Expenditures of the Rest-of-Nepal Account include commodity exports (entry 6,2), factor payment inflows (entry 6,3),

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\* Includes rental value of owner-occupied housing which is excluded from the present study.

institution income inflows (entry 6,4), and financial inflows (entry 6,5). Net trade balance shows an excess of exports over imports and thus a net financial flow in the opposite direction or a net transfer of wealth from within the village system to outside the village system. More specific results of this transfer will be shown in a later section.

### Analysis of the SAM

The individual accounts of the SAM are discussed in more detail in this section showing receipts and expenditures for each of the accounts. Disaggregation of the accounts to caste and farm size is not presented here but is discussed in the next chapter on analysis of income distribution.

#### Activity Account

Output of the 15 production activities is equal to Rs. 39,177,150 (Table XXXII). The crops activity accounts for 46.1 percent of all receipts and is followed in magnitude by livestock at 10.1 percent, and ploughing and transport activity (PATA) at 8.9 percent. The 'Other Services' activity is an aggregation of social services, non-food, and maintenance. Output of the Activity Account shows that the study region is basically an agrarian economy centered around farming activities and primarily cropping activities.

Expenditures of the Activity Account include value added factor payments, intermediate inputs, and imported material inputs. In all, factor payments accounted for about 52 percent of total expenditures, domestically produced intermediate goods accounted for 34 percent, and imported material inputs accounted for 14 percent. All activities other than external milling, other services, and internal milling contributed high levels of value added. Except

TABLE XXXII  
RECEIPTS AND EXPENDITURES OF THE ACTIVITY  
ACCOUNT FOR THE KUMROJ PANCHAYAT  
SAM, 1988

Activity	Receipts		Expenditures							
	(Rs.000)	(Percent)	-----Rs. 000-----				-----Percent -----			
			Value Added	Intermed Inputs	Imported Inputs	Total	Value Added	Intermed Inputs	Imported Input	Total
Crops	18066.80	46.12	13216.30	3982.40	868.10	18066.80	73.15	22.04	4.80	100.00
Livestock	3939.40	10.06	1673.15	2252.15	14.10	3939.40	42.47	57.17	0.36	100.00
Fish (P)	231.50	0.59	177.50	40.30	13.70	231.50	76.67	17.41	5.92	100.00
Fish (C)	120.20	0.31	119.20	1.00	0.00	120.20	99.17	0.83	0.00	100.00
Forstry (P)	416.30	1.06	307.50	24.20	84.60	416.30	73.87	5.81	20.32	100.00
CFU	120.25	0.31	118.94	0.00	1.31	120.25	98.91	0.00	1.09	100.00
TCFU	138.00	0.35	138.00	0.00	0.00	138.00	100.00	0.00	0.00	100.00
GFU	499.00	1.27	451.50	42.60	4.90	499.00	90.48	8.54	0.98	100.00
Mill	3917.70	10.00	73.20	3798.60	45.90	3917.780	1.87	96.96	1.17	100.00
PATA	3491.10	8.91	2101.32	1313.55	76.23	3491.10	60.19	37.63	2.18	100.00
TAS	645.80	1.65	562.10	75.70	8.00	645.80	87.04	11.72	1.24	100.00
GCA	1072.10	2.74	1072.10	0.00	0.00	1072.10	100.00	0.00	0.00	100.00
CIP	227.90	0.58	127.70	242.00	58.20	227.98	56.03	18.43	25.54	100.00
Ext-mill	1421.60	3.63	3.30	1354.30	64.00	1421.60	0.23	95.27	4.50	100.00
OthrServc	4869.50	12.43	172.90	513.10	4183.50	4869.50	3.55	10.54	85.91	100.00
<b>TOTAL</b>	<b>39177.15</b>	<b>100.00</b>	<b>20314.71</b>	<b>13439.98</b>	<b>5422.54</b>	<b>39177.15</b>	<b>51.85</b>	<b>34.31</b>	<b>13.84</b>	<b>100.00</b>

livestock, ploughing, and cottage industry, all other activities expended 70 percent or more to value added. Livestock and ploughing activities depend heavily on intermediate inputs such as feeds and cottage industry depends heavily on imported raw materials (e. g. thread and timber). Hence, their contribution to value added is relatively smaller. Nevertheless, both livestock and PATA activities are important in providing year-round employment to household members especially women and children.

### Commodity Account

The Commodity Account received goods and services from production activities and from trade (imports) and thus show expenditures to these accounts. The gross expenditures and receipts are presented in Table XXXIII.

Out of all commodity expenditures, paddy accounted for 25 percent followed by rice (10 percent), ploughing and transport services (8.3 percent), non-food (7.8 percent), mustard (7 percent), milk and milk products (7 percent), maize (6 percent), other foods (5 percent), grass (4 percent), and trade and services (3 percent).

Commodity receipts were from intermediate input demand, institution demand, and export demand. About 38 percent of commodity demand was from institutions (households), 32 percent was from intermediate input demand, and 30 percent was from export demand. Commodities such as straw, maize by-products, mustard oil, mustard cake, other food, meat, grass, fuel/lighting, ploughing and transport services, other non-food, and maintenance services were completely consumed domestically. In fact, import and export did occur for some of these items and thus the net effect was zero on trade balance.

TABLE XXXIII  
RECEIPTS AND EXPENDITURES OF THE COMMODITY  
ACCOUNT FOR THE KUMROJ PANCHAYAT  
SAM, 1988

Commodity	Receipts								Expenditures	
	Inter-med Input Demand	Institut- on De- mand	Export Demand	Total Demand	Inter-med Input Demand	Institu- on De- mand	Export Demand	Total Demand		
	(Rs.000)				(Percent)				Rs 000	Percent
Paddy	4323 80	0 00	6195 70	10519 50	41 10	0 00	58 90	100 00	10519 50	24.61
Straw	1269 00	0 00	0.00	1269 00	100 00	0.00	0.00	100 00	1269 00	2 97
Rice	20.20	3443 00	630 00	4093 20	0 49	84 12	15 39	100.00	4093 20	9 58
Ricebran	427 20	0 00	116 80	544 00	78 53	0 00	21 47	100 00	544 00	1 27
Maize	533 10	110 50	1897.00	2540.60	20 98	4 35	74 67	100 00	2540 60	5 94
Maize by-prod	0 00	110 00	0 00	110 00	0 00	100 00	0 00	100 00	110 00	0 26
Maize flour	129 90	339 80	83 50	553 20	23.48	61 42	15.09	100 00	553 20	1 29
Mustard	638 20	0 00	2455 20	3093 40	20 63	0 00	79 37	100 00	3093 40	7 24
Mustrd by-prod	0 00	16 00	0 00	16 00	0 00	100 00	0 00	100 00	16 00	0 04
Mstrd Oil	8 10	573 70	0 00	581 80	1 39	98 61	0 00	100 00	581 80	1 36
Mstrd Cake	38 80	0 00	0 00	38 80	100 00	0 00	0 00	100 00	38 80	0 09
Other food	95 90	1986 50	0.00	2082 40	4 61	95 39	0 00	100 00	2082 40	4 87
Othr F by-prod	0 00	0 00	2 00	2 00	0 00	0.00	100 00	100 00	2 00	0 00
Milk & MP	28 20	2164 00	787 80	2980 00	0 95	72.62	26 44	100 00	2980 00	6 97
Meat	70 90	534 20	0.00	605 10	11.72	88 28	0.00	100 00	605 10	1 42
Animal Head	85 40	0 00	200 00	285 40	29 92	0 00	70 08	100 00	285 40	0 67
Manure	393 70	26 70	2 10	422 50	93 18	6 32	0.50	100 00	422 50	0 99
fish	13 50	376 90	0.00	390 40	3.46	96 54	0 00	100.00	390 40	0 91
Grass	1699 90	0 00	60 30	1760 20	96 57	0 00	3 43	100 00	1760 20	4 12
Fuel/Light	0 00	506 50	0 00	506 50	0 00	100 00	0 00	100 00	506 50	1 19
Timber	407 90	0 00	0 00	407 90	100 00	0 00	0 00	100 00	407 90	0 95
PATS	3262 40	273 40	0 00	3535 80	92 27	7 73	0 00	100 00	3535 80	8 27
Non-food	0.00	3315 50	0 00	3315 50	0 00	100 00	0 00	100 00	3315 50	7 76
Soc Expend	0 00	775 00	0 00	775 00	0 00	100 00	0 00	100 00	775 00	1 81
TAS	9 60	1083.10	174 10	1266 80	0 76	85 50	13 74	100 00	1266 80	2 96
CIPs	29 10	162.10	73 30	264 50	11 00	61 29	27 71	100 00	264 50	0 62
Maintenance	410 50	368 50	0.00	779 00	52 70	47 30	0 00	100 00	779 00	1 82
<b>TOTAL</b>	<b>13895.30</b>	<b>16165.40</b>	<b>12677 80</b>	<b>42738.50</b>	<b>32 51</b>	<b>37 82</b>	<b>29.66</b>	<b>100 00</b>	<b>42738.50</b>	<b>100 00</b>

by-Prod = By-Product  
F = Foods  
MP = Milk Products  
Arml - Animal

Paddy, mustard, and maize were the main export commodities followed by milk and milk products.

### Factor Account

Total factor receipts were Rs. 21,263,910. About 95.54 percent of the receipts came from the Activity Account, 2.97 percent from the Institution Account, 0.25 percent from the Financial Account, and 1.24 percent from the RON Account. The crop activity was vital in generating value added (62 percent) followed by ploughing and transport activity (10 percent), livestock activity (8 percent), grass collecting activity (5 percent), community activities (3 percent), and trade and services activity (3 percent). Value added by factor shows labor and capital shares equal at about 42 percent while land share is about 16 percent.

Value added amounts of 97.07 percent accrued to households, 0.05 percent to community, and 2.88 percent was transferred to RON as payment to imported labor (Table XXXIV).

### Institution Account

Households and community received Rs. 23,536,010 as income (Table XXXV). Factor payments accounted for about 87.74 percent, 5.89 percent came from financial sources in the form of consumption loans and earned interest, 3.02 percent came as inter-institutional transfer, and 3.35 percent came from the Rest-of-Nepal in the form of remittances, business transfer, and others.

About 68.7 percent of total expenditures was spent for various commodities. About 2.7 percent was spent on labor with the major part

TABLE XXXIV

RECEIPTS AND EXPENDITURES OF THE FACTOR ACCOUNT  
FOR THE KUMRAJ PANCHAYAT SAM, 1988

Receipt							Expenditure						
Account	Total Factor Return (Rs.000)	Percent	Land	Percent Return to		Total	Account	Total Pay Percent (Rs.000)	Percent	Land	Percent Payment to		Total
				Labor	Capital						Labor	Capital	
Activity Account							Institution Account						
Crops	13216.30	62.15	24.87	25.52	49.60	100.00	Household	20640.71	97.07	41.68	40.52	17.80	100.00
Livstk	1673.15	7.87	0.38	44.29	55.34	100.00	Community	9.90	0.05	100.00	0.00	0.00	100.00
Fish (P)	177.50	0.83	8.90	2.48	88.62	100.00							
Fish (C)	119.20	0.56	0.00	50.25	49.75	100.00	Rest-of-Nepal Account	613.30	2.88	0.00	100.00	0.00	100.00
Forestry (P)	307.50	1.45	21.46	34.44	44.10	100.00							
CFU	118.94	0.56	0.00	99.13	0.87	100.00							
TCFU	138.00	0.65	0.00	100.00	0.00	100.00							
GFU	451.50	2.12	0.00	54.37	45.63	100.00							
Mill	73.20	0.34	0.00	27.73	72.27	100.00							
PATA	2101.32	9.88	0.19	77.38	22.43	100.00							
TAS	562.10	2.64	0.09	55.38	44.53	100.00							
GCA	1072.10	5.04	0.00	100.00	0.00	100.00							
CIP	127.70	0.60	0.00	49.96	50.04	100.00							
Ext-mill	3.30	0.02	0.00	100.00	0.00	100.00							
Other Services	172.90	0.81	0.00	100.00	0.00	100.00							
Institution Account													
Household	40.90	0.19	0.00	100.00	0.00	100.00							
Community	590.30	2.78	0.00	100.00	0.00	100.00							
Financial Account													
Capital Formation	25.00	0.12	0.00	100.00	0.00	100.00							
Interest	28.50	0.13	0.00	0.00	100.00	100.00							
Rest-of-Nepal Account	264.50	1.24	0.00	100.00	0.00	100.00							
TOTAL	21263.91	100.00	15.90	42.21	41.89	100.00		21263.91	100.00				



TABLE XXXV  
 RECEIPTS AND THE EXPENDITURES OF THE INSTITUTION  
 ACCOUNT FOR THE KUMROJ PANCHAYAT SAM, 1988

Receipts			Expenditures		
Account	(Rs.000)	Percent	Account	(Rs.000)	Percent
Factor			Commodity		
Land	8613.40	36.60	Crop	6579.50	27.96
Labor	8362.70	35.53	Livestock	2724.90	11.58
Capital	3674.51	15.61	Fish	376.90	1.60
Institution			Fuel/Lta	506.50	2.15
Transfers	711.75	3.02	PATS	273.40	1.16
Financial			Non-food	3315.50	14.09
Consn. Credit	1131.00	4.81	Soc Exp	775.00	3.29
Interest	253.10	1.08	TAS	1083.10	4.60
Rest-of-Nepal	789.55	3.35	CIPs	162.10	0.69
			Mainten	368.50	1.57
			Factor		
			Labor	631.20	2.68
			Institution		
			Transfer	711.75	3.02
			Financial		
			Loan Rept	2094.60	8.90
			Intrst Rept	715.60	3.04
			Saving	2602.53	11.06
			Rest-of-Nepal	614.93	2.61
Total	23536.01	100.00	Total	23536.01	100.00

Consn. = Consumption

Soc Exp = social Expenditure

Rept = Repayment

(95 percent) made by the community to operate various community activities. Another 3 percent of total expenditures was for transfers among institutions, and 23 percent was paid to financial agents in the form of loan repayment, interest repayment, and savings. Finally, about 2.6 percent of institutional income was transferred to RON in the form of remittances, taxes, and construction materials/stationary purchase.

### Financial Account

More detail is presented in the Financial Account than in the other aggregated accounts because of its uniqueness. A mini SAM of the financial flows is presented in Table XXXVI. Four rows and four columns complete the Financial Account showing row and column equality and are the following: (5.1) Loan Receipt, (5.2) Loan Repayment, (5.3) Wealth, and (5.4) Saving/Investment. The Wealth Account represents accumulated assets of individuals within the Kumroj Panchayat area and may represent assets of many different forms and invested or held in many different locations. The value of the Wealth Account is unknown. What is known is that the Wealth Account made available Rs. 1,345,000 of private funds for loan purposes through the Loan Receipt Account. An additional Rs. 1,530,000 was made available from the Rest-of-Nepal Account for loan purposes and came from public and private sources outside the area. The total loan funds made available through the Loan Receipt Account during the base period of 1988 was Rs. 2,875,000. These loan funds were distributed or expended by the column account to households in the Institution Account as a supplement to incomes for consumer loans and equalled Rs. 1,131,000. An additional Rs. 1,744,000 augmented the

TABLE XXXVI  
 RECEIPTS AND EXPENDITURES OF THE FINANCIAL  
 ACCOUNT FOR THE KUMROJ  
 PANCHAYAT SAM, 1988

Account	(4) Institution	(5.1) Loan Receipt	(5.2) Loan Repayment	(5.3) Wealth	(5.4) Saving Investment	(6) Rest-of- Nepal	(7) Total Receipts
(2) Commodity					455.40		455.50
(3) Factor			28.50		25.00		53.50
(4) Institution		1131.00	253.10				1384.10
(5.1) Loan Receipt				1345.00		1530.00	2875.00
(5.2) Loan Repayment	2810.20						2810.20
(5.3) Wealth			604.00				604.00
(5.4) Saving/Investment	2602.53	1744.00		-741.00		-531.00	3074.53
(6) Rest-of-Nepal			1924.60		2594.13		
(7) Total Expenditures	5412.73	2875.00	2810.20	604.00	3074.53	999.00	

Savings Account for investment purposes. That is, these funds were used to provide credit for investment in productive activities.

Loan Repayment Account represents receipts from households in the Institution Account and is the repayment of principal and interest on loans outstanding. This amount was estimated from the household survey and equalled Rs. 2,810,000 in 1988. Expenditures of the Loan Repayment Account include Rs. 28,500 to the Factor Account as margins on funds used for relending purposes, Rs. 253,100 as interest payments to households in the Institution Account, Rs. 604,000 as repayment of principal on outstanding loans and goes back into the Wealth Account, and Rs. 1,924,600 for principal and interest payments on outstanding loans to individuals and financial institutions outside the area.

The Wealth Account shows receipts of Rs. 604,000 which represents repayment of principal by households from the Loan Repayment Account. The column expenditures of the Wealth Account show a contribution of Rs. 1,345,000 to the Loan Receipts Account which makes available funds for consumer and investment loans. Because the amount of funds paid out by the Wealth Account is more than what is received by an amount equal to Rs. 741,000, an adjustment of this amount is shown in the Savings Account. This then actually shows a reduction in the column of the Savings Account by a comparable amount that is not available for investment in the Rest-of-Nepal Account. The row and column totals of the Wealth Account are now equal to Rs. 604,000.

The Savings/Investment Account shows receipts from the Institution Account and the Loan Receipts Account. In addition to the adjustment of the Wealth Account, a similar adjustment is made in the Rest-of-Nepal Account for the difference between loan receipts made available of Rs. 1,530,000 and the

loan repayment amount of Rs. 999,000 or an amount equal to Rs. 531,000 shown in the row of the Saving/Investment Account.

### Rest-of-Nepal Account

As an open economy, the Kumroj Panchayat is involved in commodity exports and imports (Table XXXVII). Of the total Rest-of-Nepal Account of Rs. 14,730,850, the region spent about 37 percent on material imports, 24 percent on commodity imports, 4 percent on labor import payments, and 4 percent on taxes and transfers. The region received payment for commodity exports (86.1 percent), factor payments for labor (1.8 percent), and remittances in the form of income transfers, pensions, and gifts (5.4 percent).

Financial flows show a regional inflow of Rs. 1,530,000 as loan receipts and Rs. 531,000 as wealth transfers. However, regional financial outflows include Rs. 1,490,600 loan repayments, Rs. 434,000 interest payments, and Rs. 2,594,130 investment outside the region. Hence there is a net financial outflow from the region. The region is a net creditor to the Rest-of-Nepal for the base year of 1988.

TABLE XXXVII  
RECEIPTS AND EXPENDITURES OF THE REST OF NEPAL  
ACCOUNT FOR THE KUMROJ PANCHAYAT SAM, 1988

Receipts			Expenditures		
Account	(Rs.000)	Percent	Account	(Rs.000)	Percent
Activity Account			Commodity Account		
Material Inputs	5422.54	36.81	Crop	11380.2	77.25
Commodity Account			Livestock	989.9	6.72
Crop	2037.8	13.83	Grass	60.3	0.41
Livstk	101.1	0.69	TAS	174.1	1.18
Fish	38.7	0.26	CIPs	73.3	0.50
Fuel/Lighting	398.05	2.70	Factor Account		
Timber	30.9	0.21	Labor	264.5	1.80
PATs	297.2	2.02	Institution Account		
TAS	621.0	4.22	Remittance	789.55	5.36
CIPs	36.6	0.25	Financial Account		
Factor Account			Loan Receipt	1530	10.39
Labor	613.3	4.16	Saving	-531	
Institution Account					
Tax & Transfer	614.93	4.17			
Financial Account					
Loan Repayment	1490.6	10.12			
Interest Payment	434	2.95			
Saving/Inv	2594.13	17.61			
Total	14730.85	100.00	Total	14730.85	100.00

INV = Investment

## CHAPTER V

### EMPIRICAL FINDINGS AND ANALYSIS OF INCOME DISTRIBUTION

#### Direct Income Analysis

Institutions (households) received income from use of resources (land, labor, and capital) under their control. Other sources of income consisted of inter-institutional transfer, business transfer, return to saving deposits, interest payments from the informal credit market, and other remittances. Direct income analysis is discussed as factor income, institution income, and use of income.

#### Factor Income

The Kumroj Panchayat SAM shown in Table XXXI accounts for aggregate factor receipts and expenditures. These data are disaggregated in Table XXXVIII to show the factor contributions from land, labor, and capital. Land rents account for 40.5 percent of factor income, labor returns for 42.2 percent, and capital returns for 17.3 percent. Limiting the analysis to factor shares in the Activity Account, land share is 42.4 percent, labor share is 39.7 percent, and capital share is 17.9 percent. The rural village activities account for 95.5 percent of income receipts with the remainder coming from labor utilized within households and community (Rs. 631,200), labor utilized in capital formation (Rs. 25,000), and labor employed outside the villages (Rs. 264,500). Factor income is distributed mainly to households within the Kumroj Panchayat

TABLE XXXVIII  
 FACTOR ACCOUNT RECEIPTS AND EXPENDITURES  
 BY LAND, LABOR, AND CAPITAL FOR KUMROJ  
 PANCHAYAT, 1988

(RS..000)			
Receipts		Expenditures	
Activity Account (Value Added)		Institution Account	
Land	8,613.40	Land	8,613.40
Labor	8,055.30	Labor	8,362.70
Capital	<u>3,646.01</u>	Capital	<u>3,674.51</u>
Sub-Total	20,314.71	Sub-Total	20,650.61
Institution Account		Rest-of-Nepal Account	
Labor (includes Household and Community)	631.20	Labor	613.30
Financial Account			
Labor	25.00		
Capital	<u>28.50</u>		
Sub-Total	53.50		
Rest-of-Nepal Account			
Labor	264.50		
Total		Total	
Land	8,613.40	Land	8,613.40
Labor	8,976.00	Labor	8,976.00
Capital	<u>3,674.51</u>	Capital	<u>3,674.51</u>
Total	21,263.91	Total	21,263.91



(97.1 percent) and to labor from outside the Panchayat (2.9 percent). Factor income is further discussed by sources of land, labor, and capital.

Land. Most land rent is from cropping<sup>1</sup> enterprises (Table XXXIX). Land rent for non-crop use (fishery, forestry, livestock, draft animals, etc.) was imputed. Gross rent is allocated by activity and the caste and farm size. Here, landholders use land for producing the activity but they do not necessarily own all of the land. Brahman-small landholders operate farms yielding Rs. 2,724,300 land rent or 31.6 percent of the total. Brahman-large landholders are next in size followed by Tharu-small landholders. The caste of Brahman operate farms yielding 49.8 percent of total land rent. The Tharu caste accounts for 22.7 percent and the Chhettri account for 16.6 percent. These three largest land operating castes account for a total of 89.1 percent of land rent.

Net rent by cast and farm size is the distribution by ownership of land. Net rent shows how ownership of land adds to household income.

Out of the total net land rent, 34.6 percent went to large farmers and 65.4 percent went to small farmers. Brahman-small received the largest share (31.4 percent) followed by Brahman-large (18.2 percent), Tharu-small (16 percent), Chhettri-small (10.9 percent), and Chhettri-large (6.2 percent). About half of the share of large farmers went to Brahman-large and half of the share of small farmers went to Brahman-small. Those that are gainers in land rent after distribution by ownership are Chhettri-large, Other Castes-large, and Brahman-large. Those that are losers in land rent after distribution by ownership are Tharu-small, Chhettri-small, Hill Tribes-small, Brahman-small, Other Castes-small, and Lower Castes-small.

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<sup>1</sup> See Chapter II for cropping system detail.

TABLE XXXIX  
LAND RENT BY ACTIVITY, CASTE, AND FARM SIZE,  
KUMROJ PANCHAYAT, 1988-89

Caste & Farm Size	(Rs. 000)						Net Rent After Distri- bution by Ownership	Percent
	Gross Rent by Activity					Sub- Total		
	Crop	Livestock	Fishery	Forestry	PATA			
Brahman-Large	1545.0	1.0	7.0	8.0	1.0	1562.0	1566.9	18.2
Brahman-Small	2700.5	1.0	0.8	21.0	1.0	2724.3	2701.8	31.4
Chhettri-Large	447.5	0.5	3.4	6.0	0.1	457.5	531.3	62.
Chhettri-Small	960.5	0.3	0.3	8.0	0.2	869.3	941.6	10.9
Tharu-Large	535.8	0.1	2.0	3.0	0.6	541.5	541.5	6.3
Tharu-Small	1397.5	1.0	1.1	10.0	1.0	1410.6	1376.6	16.0
Hill Tribes-Large	79.8	0.1	0.0	0.6	0.0	80.5	80.5	0.9
Hill Tribes-Small	374.8	0.2	0.0	2.2	0.2	377.4	353.8	4.1
Lower Castes-Large	12.3	0.0	0.0	0.3	0.0	12.5	12.5	0.1
Lower Castes-Small	79.7	0.1	0.0	1.0	0.1	80.9	78.6	0.9
Other Castes-Large	222.6	1.0	1.2	1.0	0.1	225.9	250.0	2.9
Other Castes-Small	164.9	1.0	0.0	5.0	0.1	171.0	168.4	2.0
Community							9.9	0.1
Total	8520.9	6.3	15.8	66.0	4.4	8613.4	8613.4	100.0
Percent	98.9	0.1	0.2	0.8	*	100.0		

Labor. Labor availability, in general, surpasses job availability in rural Nepal because of two reasons: 1) seasonality of the agrarian economy, and 2) the convention of counting people as available for the labor force at age 10. This result is reflected in high rates of unemployment and underemployment (Appendix Table C-1). Based on procedures of the Nepal Rastra Bank (1989) and sample survey data for the study area, mandays of labor available by caste and farm size were computed (Appendix Table C-2). The results indicate that Tharu-small account for 29.0 percent of total available labor, Brahman-small 22.4 percent, Hill Tribes-small 15.7 percent, and Chhettri-small 12.6 percent. In all, 89.6 percent of total labor available is from small farmers and 10.4 percent is from large farmers (Table XL).

Value of employment generated by caste, farm size, and village activity is presented in Table XLI. About 41.9 percent of the value of employment generated is in the cropping systems. Combining livestock, ploughing and transport, and grass collecting because these activities all relate to livestock systems, employment generation is 42.7 percent of total employment. Cropping and livestock systems thus account for a total of 84.6 of total activity employment. Large farms generated 24.1 percent of the value of employment and small farms generated 73.8 percent.

Labor income by caste, farm size, and source is presented in Table XLII. About 62 percent of household labor income is earned from the household's own activities. An additional 27.5 percent of household labor income is from wage income earned in activities of other households, 3.1 percent is earned from outside the villages, and 7.4 percent is earned from the community and directly from households. Large farm labor income is only 9.8 percent of total household income versus 90.2 percent for small farm. This compares with the

TABLE XL  
COMPARISON OF INDEX OF MANDAYS OF AVAILABLE  
LABOR TO INDEX OF EARNED LABOR INCOME BY  
CASTE AND FARM SIZE FOR KUMROJ  
PANCHAYAT, 1988

Caste and Farm Size	(Percent)	
	Index of Mandays of Available Labor	Index of Earned Labor Income
Brahman-Large	5.1	4.3
Brahman-Small	22.4	24.6
Chhettri-Large	2.0	1.8
Chhettri-Small	12.6	12.5
Tharu-Large	2.2	2.6
Tharu-Small	29.0	26.8
Hill Tribes-Large	0.3	0.3
Hill Tribes-Small	15.7	14.7
Lower Castes-Large	0.1	0.1
Lower Castes-Small	6.3	6.9
Other Castes-Large	0.7	0.7
Other Castes-Small	3.6	4.6
Total	100.0	100.0

TABLE XLI  
VALUE OF EMPLOYMENT GENERATED BY CASTE,  
FARM SIZE, AND ACTIVITY FOR KUMROJ  
PANCHAYAT, 1988.

(Rs..000)

Caste and Farm Size	Activity							Total
	Cropping System	Livestock	Fishery & Forestry	Ploughing & Transport	Trade & Services	Grass Collecting	Other	
Brahman-Large	581.3	70.0	46.0	128.9	20.1	110.0	7.4	963.7
Brahman-Small	888.0	308.6	139.4	406.2	70.0	394.0	22.0	2228.2
Chhettri-Large	134.0	26.5	26.0	47.4	23.0	42.6	3.5	303.0
Chhettri-Small	421.0	89.5	65.1	155.2	28.0	157.0	0.0	915.8
Tharu-Large	299.4	12.0	18.1	70.6	16.0	27.0	5.7	448.8
Tharu-Small	592.0	96.0	197.3	409.5	73.0	145.0	27.0	1539.8
Hill Tribes-Large	28.0	2.5	2.8	8.4	5.4	3.7	0.0	50.8
Hill Tribes-Small	189.0	93.0	106.4	248.5	10.5	127.0	14.8	789.2
Lower Castes-Large	4.9	1.0	1.3	3.2	3.0	1.0	0.0	14.4
Lower Castes-Small	76.9	14.0	39.0	42.5	48.3	14.3	0.0	235.0
Other Castes-Large	84.8	8.0	6.6	40.8	4.0	9.5	3.7	157.4
Other Castes-Small	74.0	20.2	23.6	64.2	10.0	41.0	0.0	233.0
Hired (Undistributed)	--	--	--	--	--	--	176.2	176.2
Total	3373.3	741.3	671.6	1625.4	311.3	1072.1	260.3	8055.3
Percent	41.9	9.2	8.3	20.2	3.9	13.3	3.2	100.0

TABLE XLII  
LABOR INCOME BY CASTE, FARM SIZE, AND SOURCE  
FOR KUMROJ PANCHAYAT, 1988

(RS..000)						
Caste and Farm Size	SOURCE					Total
	Own Activities	Hired Out	House -hold	Com-munity	Extra Regional	
Brahman-Large	271.60	0.00	2.00	53.40	34.00	361.00
Brahman-Small	1488.45	343.15	9.00	120.60	99.80	2061.00
Chhettri-Large	99.10	0.00	0.50	30.70	18.00	148.30
Chhettri-Small	636.84	280.56	3.00	83.60	44.00	1048.00
Tharu-Large	191.90	0.00	1.50	18.80	8.00	220.20
Tharu-Small	1331.30	784.40	6.00	100.90	22.40	2245.00
Hill Tribes-Large	17.30	0.00	0.40	0.10	6.50	24.30
Hill Tribes-Small	744.40	368.30	2.50	85.50	26.30	1227.00
Lower-Castes-Large	4.90	0.00	0.20	1.50	0.00	6.60
Lower Castes-Small	221.40	311.70	1.50	45.40	2.00	580.00
Other Castes-Large	19.20	0.00	0.40	34.20	2.50	56.30
Other Castes-Small	<u>155.38</u>	<u>210.02</u>	<u>1.00</u>	<u>15.60</u>	<u>3.00</u>	<u>385.00</u>
Total	5181.77	2298.13	28.00	590.30	264.50	8362.70
Percent	62.0	27.5	0.3	7.1	3.1	100.0

24.1 percent of labor income generated by large farm activities and the 73.8 percent generated by small farm activities.

In comparing Table XLI with Table XLII, Brahman-large, Brahman-small, Chhettri-large, Tharu-large, Hill Tribes-large, Lower Castes-large, and Other Castes-large all generated more labor income than they received as labor income. The remaining groups generated less labor income on their own activities than they earned in total as labor income. Lower Castes-small farm earned Rs. 311,700 working in activities of other households compared to Rs. 221,400 earned in their own activities. Tharu-small earned the largest amount of hired labor income at Rs. 784,400. Hired labor income was significant for all small farm households although the proportion of total labor income was only about 16.6 percent for Brahman-small. In fact, Brahman-small generated more labor income (Table XLI) than they earned as labor income (Table XLII) indicating they are net buyers of labor.

An index of mandays of available labor (see Appendix Table C-2) is compared with an index of earned labor income (computed from Table XLII) in Table XL. The index of mandays of available labor is greater than the index of earned labor income for Brahman-large, Chhettri-large, Chhettri-small, Tharus-small, and Hill Tribes-small. This could indicate either an undercounting of earned labor income or relative surplus of labor for these groups. In the case of Brahman-large and Chhettri-large this may be an underaccounting of earned labor income or relative surplus of labor for these groups. In the case of Tharus-small and Hill Tribes-small this may indicate higher levels of unemployed labor than for the other groups. Brahman-small, Lower Castes-small, and Other Castes-small show an index of earned labor income significantly higher than the index of mandays of available labor indicating that these groups may show higher proportions of employed labor than the other groups.

Of the hired labor amount, 21 percent of the labor compensation flowed out of the region for imported labor. Brahmans and Chhettri were the castes using the greater amounts of imported labor (Appendix Table B-21).

Capital. Capital returns by activity, caste, and farm size are shown in Table XLIII. Cropping systems account for 36.3 percent of activity capital returns, livestock 25.4 percent, fishery and forestry 15.3 percent, ploughing and transport 12.9 percent, trade and services 6.9 percent, and other activities 3.2 percent. Large farms account for 37.3 percent of capital returns and small farms 62.7 percent.

Gross Factor Income. The importance of rural activities in accounting for gross factor incomes is shown in Table XLIV. Cropping system accounts for 65 percent of total gross factor income. Livestock and associated activities (ploughing and transport and grass collection) account for 23.8 percent. The remaining activities account for only 11.2 percent of gross factor income.

Cropping system is more important to large farmers than to small farmers. In general, livestock systems are more important for small farmers than for large farmers. Fishery and forestry is important to Hill Tribes-small and Lower Castes-small. Ploughing and transport is important to Tharus-small and Hill Tribes-small as well as to all farmers in Lower Castes and Other Castes. Trade and services is important to Lower Castes. Grass collecting is important to Hill Tribes-small and Other Castes-small as well as to most other small farmers. Other activities are particularly important to Hill Tribes-small and Other Castes-large.

Factor Shares. Factor returns are combined by farm size and presented as factor shares in Table XLV. The overall results show that small farm households have higher labor shares and lower capital and land shares in their activities than do the large farm households. Large farm factor shares are 0.47



TABLE XLIII  
CAPITAL RETURNS BY ACTIVITY, CASTE, AND  
FARM SIZE FOR KUMROJ  
PANCHAYAT, 1988

(RS. 000)								
Caste and Farm Size	ACTIVITY							Total
	Cropping System	Livestock	Fishery & Forestry	Ploughing & Transport	Trade & Services	Grass Collecting	Other	
Brahman-Large	307.70	122.70	101.10	121.78	24.90	--	22.50	700.68
Brahman-Small	340.50	607.80	101.40	33.40	20.00	--	6.70	1109.80
Chhettri-Large	137.20	14.55	48.30	5.25	61.50	--	10.90	277.70
Chhettri-Small	160.70	53.80	43.30	16.30	9.00	--	--	283 10
Tharu-Large	57.80	6.70	35.60	13.12	17.50	--	4.80	135 52
Tharu-Small	223.50	25.20	104.30	106.60	25.50	--	29.50	514.60
Hill Tribes-Large	10 90	6.30	1.60	1.60	7.10	--	--	28.50
Hill Tribes-Small	15.80	28.30	72.15	37.40	23.50	--	27.70	204.85
Lower Castes-Large	0.70	3.00	0.99	0.80	2.60	--	--	8.09
Lower Castes-Small	0.40	12.10	13.40	6.50	25.70	--	--	58.10
Other Castes-Large	53.50	8.60	19.60	106.17	7.70	--	14.70	210.27
Other Castes-Small	<u>13 40</u>	<u>36 50</u>	<u>17 50</u>	<u>23 10</u>	<u>25 30</u>	<u>--</u>	<u>--</u>	<u>115 80</u>
Total	1322.10	925.55	559.24	472.02	250.30	--	116.80	3646.01
Percent	36.3	25.4	15.3	12.9	6.9	--	3.2	100.0

TABLE XLIV  
GROSS FACTOR INCOME BY ACTIVITY, CASTE, AND  
FARM SIZE FOR KUMROJ PANCHAYAT,  
1988.

Caste and Farm Size	ACTIVITY							Total
	Cropping System	Livestock	Fishery & Forestry	Ploughing & Transport	Trade & Services	Grass Collecting	Other	
(Rs. 000)								
Brahman-Large	2434.00	193.70	162.10	251.68	45.00	110.00	29.90	3226.38
Brahman-Small	3929.00	917.40	262.60	440.60	90.00	394.00	28.70	6062.30
Chhettri-Large	718.70	41.55	83.70	52.75	84.50	42.60	14.40	1038.20
Chhettri-Small	1542.20	143.60	116.70	171.70	37.00	157.00	0.00	2168.20
Tharu-Large	893.00	18.80	58.70	84.32	33.50	27.00	10.50	1125.82
Tharu-Small	2213.00	122.20	312.70	517.10	98.50	145.00	56.50	3465.00
Hill Tribes-Large	118.70	8.90	5.00	10.00	12.50	3.70	0.00	158.80
Hill Tribes-Small	579.60	121.50	180.75	286.10	34.00	127.00	42.50	1371.45
Lower Castes-Large	17.90	4.00	2.49	4.00	5.60	1.00	0.00	34.99
Lower Castes-Small	157.00	26.20	53.40	49.10	74.00	14.30	0.00	374.00
Other Castes-Large	360.90	17.60	28.40	147.07	11.70	9.50	18.40	593.57
Other Castes-Small	252.30	57.70	46.10	87.40	35.30	41.00	0.00	519.80
Undistributed							176.20	176.20
TOTAL	13216.30	1673.15	1312.64	2101.82	561.60	1072.10	377.10	20314.71
(percent)								
Brahman-Large	75.44	6.00	5.02	7.80	1.39	3.41	0.93	100.00
Brahman-Small	64.81	15.13	4.33	7.27	1.48	6.50	0.47	100.00
Chhettri-Large	69.23	4.00	8.06	5.08	8.14	4.10	1.39	100.00
Chhettri-Small	71.13	6.62	5.38	7.92	1.71	7.24	0.00	100.00
Tharu-Large	79.32	1.67	5.21	7.49	2.98	2.40	0.93	100.00
Tharu-Small	63.87	3.53	9.02	14.92	2.84	4.18	1.63	100.00
Hill Tribes-Large	74.75	5.60	3.15	6.30	7.87	2.33	0.00	100.00
Hill Tribes-Small	42.26	8.86	13.18	20.86	2.48	9.26	3.10	100.00
Lower Castes-Large	51.16	11.43	7.12	11.43	16.00	2.86	0.00	100.00
Lower Castes-Small	41.98	7.01	14.28	13.13	19.79	3.82	0.00	100.00
Other Castes-Large	60.80	2.97	4.78	24.78	1.97	1.60	3.10	100.00
Other Castes-Small	48.54	11.10	8.87	16.81	6.79	7.89	0.00	100.00
Undistributed							100.00	100.00
Total	65.06	8.24	6.46	10.35	2.76	5.28	1.85	100.00

for land, 0.31 for labor, and 0.22 for capital. Small farm factor shares are 0.41 for land, 0.43 for labor, and 0.16 for capital. The factor shares for all village activities are 0.42 for land, 0.40 for labor, and 0.18 for capital.

Cropping systems have high land shares, ranging from 0.63 to 0.65. Grass collecting, ploughing and transport, trade and services, 'other activities', and livestock have the higher labor shares, ranging from 0.45 to 1.00 for small farms and 0.28 to 1.00 for large farms. 'Other activities', trade and services, fishery and forestry, and livestock have the highest capital shares for large farms ranging from 0.57 to 0.72. For small farms, livestock, 'other activities', fishery and forestry, and trade and services have the highest capital shares, ranging from 0.35 to 0.55.

#### Institution Income

More detailed data on Institution Account receipts and expenditures are shown in Table XLVI. Factor payments account for 87.7 percent of institution income. A small amount of inter-household and community transfers to households (Rs. 6,000) are included in the Institution Account but the major receipts in this account are payments by households to community (Rs. 705,750). Households supplemented income through consumer loans (Rs. 1,131,000) and received interest payments (Rs. 253,100) from past loans. Transfers to households from the Rest-of-Nepal equalled Rs. 176,600 and government payments from Rest-of-Nepal to community equalled Rs. 612,950. Community receipts in total equalled Rs. 1,328,600 or about 5.6 percent of total Institution Account receipts with the remainder going to households.

Institution Account expenditures include commodity purchases (68.7 percent), factor payments (2.7 percent), institution account transfers and

TABLE XLV  
FACTOR SHARES BY ACTIVITY AND FARM SIZE FOR  
KUMROJ PANCHAYAT, 1988

Farm Size	ACTIVITY							Total
	Cropping System	Livestock	Fishery & Forestry	Ploughing & Transport	Trade & Services	Grass Collecting	Other	
<u>(Rs. 000)</u>								
Large Farms								
Land	2843.00	2.70	32.40	1.30	0.50	--	--	2879.90
Labor	1132.40	120.00	100.80	299.30	71.50	193.80	20.30	1938.10
Capital	<u>567.80</u>	<u>161.85</u>	<u>207.19</u>	<u>248.72</u>	<u>121.30</u>	<u>--</u>	<u>52.90</u>	<u>1359.76</u>
Total	4543.20	284.55	340.39	549.32	193.30	193.80	73.20	6177.76
Percent	73.54	4.61	5.51	8.89	3.13	3.14	1.18	100.00
Small Farms								
Land	5677.90	3.60	49.40	2.60	--	--	--	5733.50
Labor	2240.90	621.30	570.80	1326.10	239.80	878.30	63.80	5941.00
Capital	<u>754.30</u>	<u>763.70</u>	<u>352.05</u>	<u>223.30</u>	<u>129.00</u>	<u>--</u>	<u>63.90</u>	<u>2286.25</u>
Total	8673.10	1388.60	972.25	1552.00	368.80	878.30	127.70	13960.75
Percent	62.12	9.95	6.96	11.11	2.64	6.29	0.91	100.00
All Farms								
Land	8520.90	6.30	81.80	3.90	0.50	--	--	8613.40
Labor	3373.30	741.30	671.60	1625.40	311.30	1072.10	260.30*	8055.30**
Capital	<u>1322.10</u>	<u>925.55</u>	<u>559.24</u>	<u>472.02</u>	<u>250.30</u>	<u>--</u>	<u>116.80</u>	<u>3646.01</u>
Total	13216.30	1673.15	1312.64	2101.32	562.10	1072.10	377.10	20314.71
Percent	65.06	8.24	6.46	10.34	2.77	5.28	1.86	100.00
<u>(Proportion)</u>								
Large Farms								
Land	0.63	0.01	0.10	--	--	--	--	0.47
Labor	0.25	0.42	0.30	0.55	0.37	1.00	0.28	0.31
Capital	<u>0.12</u>	<u>0.57</u>	<u>0.60</u>	<u>0.45</u>	<u>0.63</u>	<u>--</u>	<u>0.72</u>	<u>0.22</u>
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Small Farms								
Land	0.65	--	0.05	--	--	--	--	0.41
Labor	0.26	0.45	0.59	0.86	0.65	1.0	0.50	0.43
Capital	<u>0.09</u>	<u>0.55</u>	<u>0.36</u>	<u>0.14</u>	<u>0.35</u>	<u>--</u>	<u>0.50</u>	<u>0.16</u>
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
All Farms								
Land	0.64	--	0.06	--	--	--	--	0.42
Labor	0.26	0.44	0.51	0.77	0.55	1.00	0.69*	0.40**
Capital	<u>0.10</u>	<u>0.56</u>	<u>0.43</u>	<u>0.23</u>	<u>0.45</u>	<u>--</u>	<u>0.31</u>	<u>0.18</u>
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

\* Includes 176.2 for labor not allocated by farm size.

\*\* Includes labor not allocated by farm size.

TABLE XLVI  
INSTITUTION ACCOUNT RECEIPTS AND EXPENDITURES  
BY HOUSEHOLDS AND COMMUNITY FOR  
KUMROJ PANCHAYAT, 1988

		(RS. 000)	
Receipts		Expenditures	
Factor Account		Commodity Account	
Households		Households	16072.20
Land	8603.50	Community	<u>93.20</u>
Labor	8362.70	Sub-Total	16165.40
Capital	3674.51	Factor Account	
Community		Households	
Land	<u>9.90</u>	Labor	40.90
Sub-Total	20650.61	Community	
Institution Account		Labor	<u>590.30</u>
Households	6.00	Sub-Total	631.20
Community	<u>705.75</u>	Institution Account	
Sub-Total	711.75	Households	707.65
Loan Receipt Account		Community	<u>4.10</u>
Households		Sub-Total	711.75
Consumer loans	1131.00	Loan Repayment Account	
Loan Repayment Account		Households	
Households		Principal	2094.60
Interest	253.10	Interest	<u>715.60</u>
Rest-of-Nepal Account		Sub-Total	2810.20
Households	176.60	Savings Account	
Community	<u>612.95</u>	Households	2474.53
Sub-Total	789.55	Community	<u>128.00</u>
		Sub-Total	2602.53
		Rest-of-Nepal Account	
		Households	101.93
		Community	<u>513.00</u>
		Sub-Total	614.93
Total Receipts	23536.01	Total Expenditures	23536.01

payments (3.0 percent), loan repayments by households (11.9 percent), savings by households and community (11.6 percent), and transfers and payments to Rest-of-Nepal by households and community (2.6 percent).

Institution net income for households and community is presented in Table XLVII. This income accounting shows the sources of income for each household type. In the aggregate, Brahman-small farm accounts for about 26.4 percent of Kumroj Panchayat income. Brahman-large farm was next in size with 12.1 percent followed by Chhettri-small farm with 10.6 percent. All small farm households accounted for 70.1 percent of village income, and large farm households accounted for 24.2 percent with community accounting for the remaining 5.6 percent.

On a per household basis, large farm household income was two to four times the level of small farm household income for the same caste. Large farm income ranged from Rs. 34,310 per household for the Lower Castes to Rs. 81,610 per household for the Other Castes. The ordering for large farms from high to low is Other Castes, Chhettri, Hill Tribes, Brahman, Tharus, and Lower Castes. Small farm income ranged from Rs. 11,880 to Rs. 25,370. The ordering of castes from high to low income per household is Brahman, Chhettri, Other Castes, Tharus, Hill Tribes, and Lower Castes.

The importance of factor income from rural activities is shown by the percentage distributions at the bottom of Table XLVII. Factor income from rural activities accounted for from 66 percent to 95 percent of total household income. In general, factor income from rural activities was more important to small farm households than to large farm households. Factor income from non-rural activities is basically labor income from employment outside of the village system. This accounted for from zero to 3.4 percent of total income.

TABLE XLVII

INSTITUTION NET INCOME FOR HOUSEHOLD AND  
COMMUNITY BY FACTOR AND NON-FACTOR  
SOURCES, KUMROJ PANCHAYAT, 1988

Institution	Factor Income				Non-factor Income									TOTAL INCOME
	Rural Activities			Non-rural Activity			Financial		Transfer From					
	Land	Labor	Capital	Sub-Total	Labor	Capital	Sub-total	Consumer Loans	Interest Income	Household	Community	RON	Sub-Total	
Brahman-Large	1566 98	327 00	700 68	2594 58	34 00	10 00	44 00	105 00	70 20	0 00	0 40	36 40	212 00	2850 58
Brahman-Small	2701 80	1961 20	1109 80	5772 80	99 80	8 00	107 80	228 00	81 00	0 00	1 33	25 10	335 43	6216 03
Chhettri-Large	531.30	130 30	277 70	939 30	18 00	3 70	21 70	79 00	19 20	0 00	0 10	16 40	114 70	1075 70
Chhettri-Small	941 60	1004 00	283 10	2228 70	44 00	2 00	46 00	185 00	12 10	0 00	0 70	13 70	211 50	2486 20
Tharu-Large	541 50	212 20	135 52	889 22	8 00	0 00	8 00	67 00	9 40	0.00	0.10	10.50	87 00	984 22
Tharu-Small	1376 70	2222 60	514 60	4113 80	22 40	0 00	22 40	159 00	12.10	0 00	0 70	4.30	176.10	4312 30
Hill Tribes-Large	80 50	17 80	27 50	125 80	6 50	0 00	6 50	16 00	10 80	0 00	0 05	31 40	58 25	190 55
Hill Tribes-Small	353 80	1200 70	204 85	1759 35	26 30	0 00	26 30	91 00	6 70	0.00	0 40	13 90	112.00	1897 65
Lower Castes-Large	12 50	6 60	8 09	27 19	0 00	0 00	0 00	7 00	0 10	0 00	0 02	0 00	7 12	34 31
Lower Castes-Small	78 60	580 00	58 10	716 70	0 00	0 00	0 00	48 00	0.50	1 90	0.18	0 00	50 58	767 28
Other Castes-Large	250 00	53 80	210 27	514 07	2.50	4.30	6 80	16 00	20 20	0.00	0 02	14 20	50 42	571 29
Other Castes-Small	168 40	382 00	115 80	666 20	3 00	0 50	3 50	130 00	10 80	0 00	0 10	10 70	151 60	821 30
Sub-Total	8603 50	8098 20	3646 01	20347 71	264 50	28 50	293 00	1131 00	253.10	1 90	4 10	176 60	1566 70	22207 41
Community	9 90			9 90						705.75		612 95	1318 70	1328 60
TOTAL	8613 40	8098 20	3646 01	20357 61	264 50	28 50	293 00	1131 00	253 10	707 65	4 10	789 55	2885 40	23536 01
PER HOUSEHOLD (Rs 000)														
Brahman-Large	30 72	6 41	13.74	50 87	0 67	0 20	0 86	2.06	1.38	0 00	0.01	0 71	4 16	55 89
Brahman-Small	11 03	8 00	4 53	23 56	0 41	0 03	0 44	0 93	0 33	0 00	0 01	0 10	1 37	25 37
Chhettri-Large	33 21	8 14	17 36	58 71	1 13	0 23	1.36	4 94	1 20	0 00	0 01	1 03	7 17	67 23
Chhettri-Small	8 05	8 58	2 42	19 05	0 38	0 02	0 39	1 58	0 10	0 00	0 01	0 12	1 81	21 25
Tharu-Large	24 61	9 65	6 16	40 42	0 36	0 00	0 36	3 05	0 43	0 00	0 00	0 48	3 95	44 74
Tharu-Small	6 04	9 75	2 26	18 04	0 10	0 00	0 10	0 70	0 05	0 00	0 00	0 02	0 77	18 91
Hill Tribes-Large	26 83	5 93	9 17	41 93	2 17	0 00	2 17	5 33	3 60	0 00	0 02	10 47	19 42	63 52
Hill Tribes-Small	2 79	9 45	1 61	13 85	0 21	0 00	0 21	0 72	0 05	0 00	0 00	0 11	0 88	14 94
Lower Castes-Large	12 50	6 60	8 09	27 19	0 00	0 00	0 00	7 00	0 10	0 00	0 02	0 00	7 12	34 31
Lower Castes-Small	1 21	8 92	0 09	11 03	0 00	0 00	0 00	0 74	0 01	0 03	0 00	0 00	0 78	11 80
Other Castes-Large	35 71	7 69	30 04	73 44	0 36	0 61	0 97	2 29	2 89	0 00	0 00	2 03	7 20	81 61
Other Castes-Small	4 01	9 10	2 76	15 86	0 07	0 01	0 08	3 10	0 26	0 00	0 00	0 25	3 61	19 55

TABLE XLVII (continued)

Institution	Factor Income				Non-factor Income								TOTAL INCOME	
	Rural Activities			Non-rural Activity			Financial		Transfer From					
	Land	Labor	Capital	Sub-Total	Labor	Capital	Sub-total	Consumer Loans	Interest Income	Household	Community	RON		Sub-Total
	PER HOUSEHOLD (PERCENT)													
Brahman-Large	54.97	11.47	24.58	91.02	1.19	0.35	1.54	3.68	2.46	0.00	0.01	1.28	7.44	100.00
Brahman-Small	43.47	31.55	17.85	92.87	1.61	0.13	1.73	3.67	1.30	0.00	0.02	0.40	5.40	100.00
Chhettri-Large	49.39	12.11	25.82	87.32	1.67	0.34	2.02	7.34	1.78	0.00	0.01	1.52	10.66	100.00
Chhettri-Small	37.87	40.38	11.39	89.64	1.77	0.08	1.85	7.44	0.49	0.00	0.03	0.55	8.51	100.00
Tharu-Large	55.02	21.56	13.77	90.35	0.81	0.00	0.81	6.81	0.96	0.00	0.01	1.07	8.84	100.00
Tharu-Small	31.92	51.54	11.93	95.40	0.52	0.00	0.52	3.69	0.28	0.00	0.02	0.10	4.08	100.00
Hill Tribes-Large	42.25	9.34	14.43	66.02	3.41	0.00	3.41	8.40	5.67	0.00	0.03	16.48	30.57	100.00
Hill Tribes-Small	18.64	63.27	10.79	92.71	1.39	0.00	1.39	4.80	0.35	0.00	0.02	0.73	5.90	100.00
Lower Castes-Large	36.43	19.24	23.58	79.25	0.00	0.00	0.00	20.40	0.29	0.00	0.06	0.00	20.75	100.00
Lower Castes-Small	10.24	75.59	7.57	93.41	0.00	0.00	0.00	6.26	0.07	0.25	0.02	0.00	6.59	100.00
Other Castes-Large	43.76	9.42	36.81	89.98	0.44	0.75	1.19	2.80	3.54	0.00	0.00	2.49	8.83	100.00
Other Castes-Small	20.50	46.51	14.10	81.12	0.37	0.06	0.43	15.83	1.31	0.00	0.01	1.30	18.46	100.00



Consumer loans accounted for 2.8 to 20.4 percent of household income. Outside of Lower Castes large farm and Other Castes small farm, consumer loans accounted for only 2.8 to 8.4 percent of household income. Interest income varied from 0.07 to 5.67 percent of household income and was more important to large farm households than to small farm households. Transfer income was important for only the Hill Tribes large farm households where it accounted for 16.5 percent of income. For other household groups, transfer income ranged from 0.06 percent to 2.5 percent.

Total non-factor income ranged from 4.1 to 30.6 percent of household income. In general, it was more important to large farm households than to small farm households. The one exception is Other Castes where small farm households had a greater percentage of non-factor income than did large farm households. However, this was because of a significant amount of consumer loans to the small farm households.

### Use of Net Income

It is important to know the way net income was spent by the households. It was spent to pay obligations (such as land tax, loan repayment, etc.), meet consumption needs of the households, and as savings for further investment. The expenditure pattern of households is presented in Table XLVIII.

A major portion of net income (53 to 81 percent) was spent on consumption. Large farm households, in general, spent proportionately less on consumption than did small farm households. However, in nominal terms, large farm households of each caste spent significantly higher amounts than did small farm households of the same caste. Small farm households spent from Rs. 9,150 to Rs. 18,000 on consumption (71 percent to 81 percent of net

household income). Large farm households spent from Rs. 27,030 to Rs. 43,410 on consumption (53 percent to 81 percent of net household income).

In all castes, large farm households spent proportionally less on food items and more on non-foods, social expenditure, trade and services, and maintenance. For large farm households, expenditures on food ranged from 41 percent to 50 percent while the range was between 53 percent to 70 percent for small farm households. These results are similar to those available as the national average for rural Nepal (Nepal Rastra Bank, 1989) where large, medium, small, marginal farmers, and non-cultivators were found to have spent 59.1, 62.8, 63.7, 65.9, and 65.4 percent of their consumption budget on food.

Loan repayments consumed considerably large portions of the net income for some household types. This is because of high demand for loans for investment purposes by large farmers and small farmers of upper caste. Loan repayment varied from 5 to 15 percent of net income for small farm households and from 8 to 33 percent for large farm households. Savings, in general, was a higher proportion of household net income for large farm households than for small farm households. Savings ranged from 2 to 23 percent of income. Household savings constituted in-kind and cash savings. Growing timber was the saving in-kind.

Inter-institutional transfer was an important expenditure in funding community activities. In general, large farm households spent more per household than small farm households but on a percentage basis the amounts are very similar.

In general, outflow of (net) income to RON through land tax and remittances was minor except for Chhettri-large and Other Castes-large. The share of outflow in net income generally was less than one percent. Family

TABLE XLVIII  
USE OF NET INCOME BY CASTE AND FARM SIZE  
FOR KUMROJ PANCHAYAT, 1988

Account	Brhmn-L	Brhmn-S	Chhtr-L	Chhtr-S	Tharu-L	Thaur-S	HTrbe-L	HTrbe-S	Lo-L	Lo-S	Othrs-L	Othrs-S	Sub-Ttl	Community	Total
----- Aggregate (Rs. 000) -----															
Commodity															
Rice	148	695	50	378	97	1336	9	388	3	187	21	131	3443		3443
Maize & Mz Prod	46.2	189	10.4	83	13	41	2	109	0.9	47	3.7	15.1	560.3		560.3
Mustard	54	171	18	80	35	117	1.1	83	0.3	12.5	2	15.8	589.7		589.7
Other foods	199	596	67	298	42	342	13	212	2.5	90	40	85	1986.5		1986.5
Milk & Milk Prod	300	1045	80	230	22	148	14	190	4	28	38	65	2164		2164
Meat & Fish	89.6	173	44	95	90	240	9	88	1	26	20.5	35	911.1		911.1
Fuel/Lighting	58	145	19	58	22.7	133	4	39	1.5	13	8	32	533.2		533.2
P&T Services	50	67	14	19	17	40	3	10	0.2	1.5	7.5	1	230.2	43.2	273.4
Non-foods	490	784	180	385	154	684	32	250	8.5	110	88	150	3315.5		3315.5
Soc Expenses	169.5	199	59.7	89.5	44.8	99.5	8.9	39.8	0.1	15	9.7	39.5	775		775
Trade Services	120	216.9	61.3	162.2	36.2	234.6	9.2	76.1	1.8	46.7	36.8	65.3	1067.1	16.0	1083.1
CIPS	3.5	12	17	7	9	33	2.5	22.5	3.1	7.8	3.7	7	128.1	34.0	162.1
Maintn	50	117.5	38.4	29	12	45	4.5	20.2	0.8	10.5	25	156	368.5		368.5
Sub-Total	1777.8	4410.4	658.8	1913.7	594.7	3493.1	112.2	1527.6	27.7	595	303.9	657.3	16072.2	93.2	16165.4
Factor Labor	7	12	2	4	2	6	0.5	2.5	0.2	1.5	1.2	2	40.9	590.3	631.2
Institution															
Household	0.5	0.4	0.2	0.2	0.1	0.2		0.1			0.1	0.1	1.9	4.1	6
Community	107.5	175.2	44.8	83	46.8	124.6	9.35	53.95	1.26	19.39	20.55	19.35	705.75		705.75
Sub-Total	108	175.6	45	83.2	46.9	124.8	9.35	54.05	1.26	19.39	20.65	19.45	707.65	4.1	711.75
Financial															
Loan Repymt															
Principal	406.4	697.1	183	197	89	127	56	81	1.6	77	90	89.5	2094.6		2094.6
Interest	153	258.9	39.3	64.4	20.7	75.1	7.1	34.2	1.34	24.7	8.8	28.1	715.6		715.6
Sub-Total	559.4	956	222.3	261.4	109.7	202.1	63.1	115.2	2.9	101.7	98.8	117.6	2810.2		2810.2
Saving(Pvt)	383.38	637.2	135.6	220.9	223.92	474.3	4.4	190.3	2	47.69	131.74	23.1	2474.53	128.0	2602.53
RON	15	24.83	12	3	7	12	1	8	0.25	2	15	1.85	101.93	513.0	614.93
Total	2850.58	6216.03	1075.7	2486.2	984.22	4312.3	190.55	1897.65	34.31	767.28	571.29	821.3	22207.41	1328.6	23536.01

TABLE XLVIII (continued)

Account	Brhmn-L	Brhmn-S	Chhtri-L	Chhtri-S	Tharu-L	Thaur-S	HTrbe-L	HTrbe-S	Lo-L	Lo-S	Othrs-L	Othrs-S
Per Household (Rs.)												
Commodity												
Rice	2901.96	2836.73	3125.00	3230.77	4409.09	5859.65	3000.00	3055.12	3000.00	2876.92	3000.00	3119.05
Maize and Mz Prod	905.88	771.43	650.00	709.40	590.91	179.82	666.67	858.27	900.00	723.08	528.57	359.52
Mustard Products	1058.82	697.96	1125.00	683.76	1590.91	513.16	366.67	653.54	300.00	192.31	285.71	376.19
Other foods	3901.96	2432.65	4187.50	2547.01	1909.09	1500.00	4333.33	1669.29	2500.00	1384.62	5714.29	2023.81
Milk and Milk Prod	5882.35	4265.31	5000.00	1965.81	1000.00	649.12	4666.67	1496.06	4000.00	430.77	5428.57	1547.62
Meat and Fish	1756.86	706.12	2750.00	811.97	4090.91	1052.63	3000.00	692.91	1000.00	400.00	2928.57	833.33
Fuel/Lighting	1137.25	591.84	1187.50	495.73	1031.82	583.33	1333.33	307.09	1500.00	200.00	1142.86	761.90
P&T Services	980.39	273.47	875.00	162.39	772.73	175.44	1000.00	78.74	200.00	23.08	1071.43	23.81
Non-foods	9607.84	3200.00	11250.00	3290.60	7000.00	3000.00	10666.67	1968.50	8500.00	1692.31	12571.43	3571.43
Soc. Expenses	3323.53	812.24	3731.25	764.96	2036.36	436.40	2966.67	313.39	100.00	230.77	1385.71	940.48
Trade Services	2352.94	885.31	3831.25	1386.32	1645.45	1028.95	3066.67	599.21	1800.00	718.46	5257.14	1554.76
CIPs	68.63	48.98	1062.50	59.83	409.09	144.74	833.33	177.17	3100.00	120.00	528.57	166.67
Maintn.	980.39	479.59	2400.00	247.86	545.45	197.37	1500.00	159.06	800.00	161.54	3571.43	371.43
Sub-Total	34858.82	18001.63	41175.00	16356.41	27031.82	15320.61	37400.00	12028.35	27700.00	9153.85	43414.29	15650.00
Factor												
Labor	137.25	48.98	125.00	34.19	90.91	26.32	166.67	19.69	200.00	23.08	171.43	47.62
Institution												
Household	9.80	1.63	12.50	1.71	4.55	0.88	0.00	0.79	0.00	0.00	14.29	2.38
Community	2107.84	715.10	2800.00	709.40	2127.27	546.49	3116.67	424.80	1260.00	298.31	2935.71	460.71
Sub-Total	2117.65	716.73	2812.50	711.11	2131.82	457.37	3116.67	425.59	1260.00	298.31	2950.00	463.10
Financial												
Loan Repayment												
Principal	7968.63	2845.31	11437.50	1683.76	4045.45	557.02	18666.67	637.80	1600.00	1184.62	12857.14	2130.95
Interest	3000.00	1056.73	2456.25	550.43	940.91	329.39	2366.67	269.29	1300.00	380.00	1257.14	669.05
Sub-Total	10968.63	3902.04	13893.75	2234.19	4986.36	886.40	21033.33	907.09	2900.00	1564.62	14114.29	2800.00
Saving(Pvt)	7517.25	2600.82	8475.00	1888.03	10178.18	1080.26	1466.67	1498.43	2000.00	733.69	18820.00	550.00
RON	294.12	101.35	750.00	25.64	318.18	52.63	333.33	62.99	250.00	30.77	2142.86	44.05
Total	55893.73	25371.55	67231.25	21249.57	44737.27	18913.60	63516.67	14942.13	34310.00	11804.31	81612.86	19554.76

TABLE XLVIII (continued)

Account	Brhmn-L	Brhmn-S	Chhtri-L	Chhtri-S	Tharu-L	Thaur-S	HITrbe-L	HTrbe-S	Lo-L	Lo-S	Othrs-L	Othrs-S
Per Household (percent)												
Commodity												
Rice	5.19	11.18	4.65	15.20	9.86	30.98	4.72	20.45	8.74	24.37	3.68	15.95
Maize and Mz Prod	1.62	3.04	0.97	3.34	1.32	0.95	1.05	5.74	2.62	6.13	0.65	1.84
Mustard Products	1.89	2.75	1.67	3.22	3.56	2.71	0.58	4.37	0.87	1.63	0.35	1.92
Other foods	6.98	9.59	6.23	11.99	4.27	7.93	6.82	11.17	7.29	11.73	7.00	10.35
Milk and Milk Prod	10.52	16.81	7.44	9.25	2.24	3.43	7.35	10.01	11.66	3.65	6.65	7.91
Meat and Fish	3.14	2.78	4.09	3.82	9.14	5.57	4.72	4.64	2.91	3.39	3.59	4.26
Fuel/Lighting	2.03	2.33	1.77	2.33	2.31	3.08	2.10	2.06	4.37	1.69	1.40	3.90
P&T Services	1.75	1.08	1.30	0.76	1.73	0.93	1.57	0.53	0.58	0.20	1.31	0.12
Non-foods	17.19	12.61	16.73	15.49	15.65	15.86	16.79	13.17	24.77	14.34	15.40	18.26
Soc. Expenses	5.95	3.20	5.55	3.60	4.55	2.31	4.67	2.10	0.29	1.95	1.70	4.81
Trade Services	4.21	3.49	5.70	6.52	3.68	5.44	4.83	4.01	5.25	6.09	6.44	7.95
CIPs	0.12	0.19	1.58	0.28	0.91	0.77	1.31	1.19	9.04	1.02	0.65	0.85
Maintn.	1.75	1.89	3.57	1.17	1.22	1.04	2.36	1.06	2.33	1.37	4.38	1.90
Sub-Total	62.37	70.95	61.24	76.97	60.42	81.00	58.88	80.50	80.73	77.55	53.20	80.03
Factor												
Labor	0.25	0.19	0.19	0.16	0.20	0.14	0.26	0.13	0.58	0.20	0.21	0.24
Institution												
Household	0.02	0.01	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.02	0.01
Community	3.77	2.82	4.16	3.34	4.76	2.89	4.91	2.84	3.67	2.53	3.60	2.36
Sub-Total	3.79	2.82	4.18	3.35	4.77	2.89	4.91	2.85	3.67	2.53	3.61	2.37
Financial												
Loan Repayment												
Principal	14.26	11.21	17.01	7.92	9.04	2.95	29.39	4.27	4.66	10.04	15.75	10.90
Interest	5.37	4.17	3.65	2.59	2.10	1.74	3.73	1.80	3.79	3.22	1.54	3.42
Sub-Total	19.62	15.38	20.67	10.51	11.15	4.69	33.11	6.07	8.45	13.25	17.29	14.32
Saving(Pvt)	13.45	10.25	12.61	8.89	22.75	11.00	2.31	10.03	5.83	6.22	23.06	2.81
RON	0.53	0.40	1.12	0.12	0.71	0.28	0.52	0.42	0.73	0.26	2.63	0.23
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

members living outside the study region and requiring support accounted for the comparatively larger transfers for the Chhettri-large and Other Castes-large.

### Direct and Indirect Income Analysis Using Fixed Price SAM Multipliers

To exploit the interrelationships implied by the Kumroj SAM between activities, commodities, factors, institutions, finances, and exogenous accounts, a matrix of interdependence coefficients or SAM multipliers are constructed (Pyatt and Round). The mathematical relationship is the following:

$$X = (I - A)^{-1} Z$$

where  $X$  is the vector of row (or column) totals for the identified endogenous accounts,  $I$  is an identity matrix,  $A$  is a coefficient matrix,  $Z$  denotes the vector of row totals for exogenous flows, and  $(I - A)^{-1}$  is the square matrix of interdependence coefficients. The  $A$  matrix is a matrix of expenditure coefficients where each column expenditure is assumed a fixed proportion of its respective column total (the total outlay). The assumptions of fixed prices and unitary expenditure elasticities are maintained in the analysis. Consequently, in the fixed price multiplier analysis, marginal expenditure propensities are assumed equal to average expenditure propensities.

The interdependence coefficients indicate the total change in each row account as a result of a one unit change in the exogenous component of the column account. The total change includes the direct effect as well as the indirect effect.

An interdependence coefficient is interpreted as the direct and indirect change in the row account for each unit change in the column account. It helps

understand the outcome of an assumed change in the Activity Account, Commodity Account, Factor Account, Institution Account, and Financial Account.

### Activity Account

Out of 15 activities undertaken by rural households, 8 are considered for analysis because of their prominence in the area. In the analysis that follows, the total (direct and indirect) effects of a marginal change in the activity is considered on returns to factors and institution (household) incomes. Among the households, the effects on the household initiating the activity as well as the indirect effects on all other households are presented. Indirect effects are further decomposed into 'trickle down' effect (from large farms to small farms) and 'trickle up' effect (from small farms to large farms).

Cropping System. All castes and farm sizes are involved in cropping systems. Land rent varies from household group to household group because of differences in land quality. Land rent ranged from Rs. 912 per bigha on land owned by Lower Castes-small to Rs. 3,434 per bigha on land owned by Brahman-small (Table IL). Revenue per bigha of land ranged from Rs. 2,792.2 for Lower Castes-small producers to Rs. 7,446.5 for Brahman-small producers. The direct and indirect effects of the Brahman-large producer cropping system on the Factor Account include returns of Rs. 4,282 to all land, Rs. 3,754 to all labor, and Rs. 1,692 to all capital. These results are calculated by multiplying the revenue per bigha by the interdependence coefficients (Appendix Table D-2) for all land, all labor, and all capital belonging to the cropping system (Appendix B) activity of Brahman-large. In similar fashion, results for the Institution Account were computed by multiplying the revenue per bigha by the interdependence coefficient for each household group. This result shows the

TABLE II

DIRECT AND INDIRECT EFFECTS ON FACTOR  
AND INSTITUTION ACCOUNTS FOR THE  
MARGINAL UNIT OF LAND IN EACH  
CROPPING SYSTEM BY CASTE  
AND FARM SIZE, KUMROJ  
VILLAGE SYSTEM 1988

		Cr-BL	Cr-BS	Cr-CI	Cr-CS	Cr-TL	Cr-TS	Cr-HTL	Cr-HTS	Cr-LL	Cr-LS	Cr-OL	Cr-OS
	UNIT	1	2	3	4	5	6	7	8	9	10	11	12
Land Unit	Bigha	1	1	1	1	1	1	1	1	1	1	1	1
Revenue/Bigha	Rs	6350.8	7446.5	6475.7	6009.7	5606.8	5280.8	6191.7	3489.9	3988.7	2792.2	8004.3	5559.2
Land Rent/Bigha	Rs	2903.5	3434.4	2983.1	3809.1	2624.9	2460.9	2889.3	1642.6	1872.1	9120	2526.1	2635
FACTOR ACCOUNT													
Land		4282.2	5680.9	4317.5	4433.0	3885.8	4058.1	4261.1	2615.6	2890.5	1752.2	5420.5	4055.8
Labor		3754.1	4671.9	3505.3	3966.1	3716.0	3540.4	3786.7	2632.4	2733.4	2285.3	4650.0	3741.5
Capital		1691.7	1961.5	2019.3	1631.2	1279.6	1470.8	1521.4	849.6	957.7	574.7	2259.8	1315.0
TOTAL		9728.0	12314.3	9842.1	10030.2	8881.4	9069.3	9569.2	6097.5	6581.6	4612.2	12330.4	9112.3
Land Rent Multiplier		3.35	3.59	3.30	3.57	3.38	3.69	3.31	3.71	3.52	5.06	4.88	3.40
INSTITUTION ACCOUNT													
Brahman-Large		4218.0	830.7	606.4	668.5	556.6	639.1	638.7	454.0	448.5	339.8	745.8	626.3
Brahman-Small		1637.4	6744.6	1571.4	1670.4	1362.3	1445.5	1657.4	1074.6	1155.4	787.6	1999.4	1549.1
Chhettri-Large		220.6	312.9	4192.4	291.8	203.4	268.8	228.4	209.4	156.3	133.5	278.0	249.1
Chhettri-Small		686.3	852.2	655.5	4426.8	592.6	584.3	717.6	418.8	465.7	317.7	872.5	619.3
Tharu-Large		200.5	263.7	197.9	216.7	3565.5	213.6	210.5	145.8	141.8	111.0	250.3	203.3
Tharu-Small		1396.7	1681.1	1341.2	1364.5	1264.4	4774.5	1461.8	829.7	1004.7	648.8	1790.6	1240.3
Hill Tribes-Large		34.9	44.7	34.9	36.0	29.2	32.8	3424.6	23.1	24.2	17.6	43.4	35.2
Hill Tribes-Small		661.8	785.4	639.2	626.0	600.2	540.8	700.9	2563.2	485.5	297.3	845.9	574.2
Lower Castes-Large		8.9	11.0	8.9	8.6	7.2	7.6	10.1	5.4	2149.4	4.0	12.0	8.5
Lower Castes-Small		321.2	357.1	303.7	291.3	288.6	224.8	332.3	151.2	212.3	1764.7	428.8	259.5
Other Castes-Large		147.0	193.6	144.2	169.2	132.4	162.0	159.3	123.4	108.1	88.2	4856.9	150.2
Other Castes-Small		301.6	347.3	286.0	272.1	259.8	217.6	323.3	152.0	192.6	117.7	402.0	3719.5
Community		330.1	378.6	353.1	330.7	332.1	284.5	368.1	195.5	216.2	138.1	412.3	266.5
TOTAL		10164.9	12803.0	10334.7	10372.6	9194.2	9395.9	10233.0	6346.1	6760.6	4766.1	12938.2	9501.0
Land Rent Multiplier		3.50	3.73	3.46	3.69	3.50	3.82	3.54	3.86	3.61	5.23	5.12	3.61
Land Rent Multiplier for Primary Households		1.45	1.96	1.41	1.58	1.36	1.94	1.19	1.56	1.15	1.93	1.92	1.41
Trickle Down Effects to													
Small Farm Households (Rs.)		5004.93		4796.96		4367.81		5193.27		3516.19		6339.31	
Multiplier		1.72		1.61		1.66		1.80		1.88		2.51	
Trickle Up Effects to													
Large Farm Households (Rs.)			1656.68		1390.84		1323.88		961.07	694.10		1272.54	
Multiplier			0.48		0.50		0.54		0.59	0.76		0.48	



interdependence of the cropping system by Brahman-large on each household group. Among all households, Brahman-small received maximum direct and indirect benefit (addition of row for Brahman-small).

The land rent multiplier for the Factor Account is interpreted as the total factor returns per rupee of land rent. For Brahman-large cropping system each rupee of land rent is directly and indirectly associated with 3.35 rupees of total factor return. Similarly, each rupee of land rent is directly and indirectly associated with 3.50 rupees of income for all households, including Brahman-large, under cropping system activity of Brahman-large. One interpretation of these results is that if the direct land rent indicates the opportunity cost of land, one additional unit of land made available by cropping system of Brahman-large will be associated with the factor returns and household incomes presented by the land rent multipliers in Table IL. The same holds true for the rest of the castes and farm sizes included in Table IL.

Brahman-small shows the highest land rent per bigha but the land rent multipliers for the Lower Castes-small and Other Castes-large were the highest. This implies that the marginal unit of land for the Lower Castes-small and Other Castes-large have the greatest total return in proportion to land rent. However, Brahman-small has the highest direct land multiplier (1.96) among all households. This implies that the marginal land unit for the Brahman-small has the greatest income effect on the same household group.

Two additional land rent multipliers for the Institutional Account are defined: (1) trickle down effect from large farm households to small farm households and (2) a trickle up effect from small farm households to large farm households. Among all large farm groups, the Other Castes-large had the highest trickle down effect of Rs. 2.51 for each Rs. 1.0 land rent available to the household. Higher trickle down effects are associated with greater hiring of

factors of production (mainly labor) because it is the small farm households providing the labor and transport services. The trickle down effect from large farm Chhettri and Tharu were the lowest indicating those households performed more of their own services. The trickle up effect from small farm households to large farm households was the highest for Lower Castes-small and Hill Tribes-small. The level of trickle up effect is associated with the hiring of ploughing (tractor) services by small farmers as well as leasing-in of land by the small farmers. Brahman-small, Other Castes-small, and Chhettri-small had the lowest trickle up effects. The trickle down effects are much stronger per unit of land rent than the trickle up effects. This result indicates that large farm households have a strong effect on the economic vitality of small farm households, a result not previously well documented.

The relative direct and indirect effects of a marginal unit of capital on factor returns and household incomes are presented in Table L. Capital returns are standardized to Rs. 1,000 for each cropping system. Revenue per Rs. 1,000 capital returns appears in the third line of Table L. Capital requirements were not estimated by cropping system, but rather, capital returns were calculated as a residual after all other inputs and factors were allocated their shares. Hence, the factor returns are calculated on the basis of a Rs. 1,000 returns to capital for each cropping system. Total factor returns per Rs. 1,000 capital returns range from Rs. 10,761 for Chhettri-large to Rs. 1,013,375 for Lower Castes-small. In general, total factor returns per Rs. 1,000 capital returns is greater for small farms than for large farms, indicating lower capital inputs per unit of output for small farms. The capital multipliers for total factor returns range from 21.3 to 95.5 (excluding Lower Castes-small) for small farm households and 10.8 to 61.8 for large farm households.

TABLE L

DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF CAPITAL RETURNS IN EACH  
CROPPING SYSTEM BY CASTE  
AND FARM SIZE, KUMROJ  
VILLAGE SYSTEM 1988

	Cr-BL	Cr-BS	Cr-CI	Cr-CS	Cr-TL	Cr-TS	Cr-HTL	Cr-HTS	Cr-LL	Cr-LS	Cr-OL	Cr-OS
UNIT	1	2	3	4	5	6	7	8	9	10	11	12
Capital Returns	Rs. 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Capital Coefficient	0 091035	0 063278	0 141239	0 078199	0 05048	0 074524	0 063779	0 018297	0 026717	0 00163	0 112631	0 037874
Revenue	Rs. 10984.78	15803.28	7080.19	12787.88	19809.82	13418.49	15679.14	54653.76	37429.35	613496.9	8878.55	26403.33
FACTOR ACCOUNT												
Land	7406.8	12056.3	4720.5	9432.8	13729.2	10311.6	10790.4	40961.3	27124.4	384992.9	6012.6	19262.8
Labor	6493.3	9915.0	3832.5	8439.3	13129.3	8996.2	9589.0	41224.6	25649.4	502111.7	5157.9	17770.2
Capital	2926.1	4162.7	2207.8	3470.9	4521.1	3737.2	3852.5	13304.7	8987.1	126270.5	2506.6	6245.5
TOTAL	16826.2	26134.0	10760.8	21343.0	31379.6	23045.0	24231.9	95490.5	61760.9	1013375	13677.1	43278.6
Capital Returns Multiplier	16.83	26.13	10.76	21.34	31.38	23.05	24.23	95.49	61.76	1013.38	13.68	43.2
INSTITUTION ACCOUNT												
Brahman-Large	7295.7	1763.0	663.1	1422.5	1966.7	1623.9	1617.4	7109.8	4209.1	74660.9	827.3	2974.6
Brahman-Small	2832.1	14313.7	1718.1	3554.3	4813.4	3673.0	4197.0	16829.1	10842.6	173054.2	2217.8	7357.6
Chhettri-Large	381.6	664.0	4583.7	621.0	718.7	682.9	578.3	3279.3	1466.6	29329.2	308.3	1183.2
Chhettri-Small	1187.2	1808.6	716.7	9419.6	2093.6	1484.8	1817.1	6558.2	4370.0	69810.2	967.8	2941.3
Tharu-Large	346.7	559.7	216.4	461.1	12597.6	542.9	533.1	2283.2	1330.2	24382.7	277.7	965.6
Tharu-Small	2415.8	3567.8	1466.4	2903.5	4467.2	12132.0	3701.7	12993.6	9427.8	142546.2	1986.2	5890.7
Hill Tribes-Large	60.4	94.8	38.1	76.5	103.2	83.4	8672.0	361.4	227.0	3876.3	48.2	167.0
Hill Tribes-Small	1144.6	1666.8	698.8	1332.1	2120.7	1374.2	1774.8	40140.9	4556.1	65330.0	938.3	2727.3
Lower Castes-Large	15.4	23.4	9.7	18.4	25.6	19.3	25.5	85.2	20169.3	880.4	13.4	40.4
Lower Castes-Small	555.6	757.8	332.1	619.8	1019.5	571.2	841.5	2368.3	1992.0	387742.7	475.6	1232.6
Other Castes-Large	254.3	411.0	157.6	360.1	467.7	411.7	403.4	1932.2	1014.5	19375.8	5387.4	713.2
Other Castes-Small	521.7	737.0	312.7	579.1	917.8	552.9	818.7	2381.0	1806.9	25855.4	445.9	17665.7
Community	571.0	803.5	386.1	703.7	1173.2	722.9	932.2	3061.0	2028.5	30349.4	457.4	1265.8
TOTAL	17582.0	27171.1	11299.5	22071.7	32484.9	23875.0	25912.8	99383.0	63440.7	1047193	14351.3	45124.9
Capital Returns Multiplier	17.58	27.17	11.30	22.07	32.48	23.87	25.91	99.38	63.44	1047.19	14.35	45.12
Capital Returns Multiplier for	7.2	14.3	4.6	9.4	12.6	12.1	8.7	40.1	20.2	387.7	5.4	17.7
Trickle Down Effects to Small Farm Households (Rs) Multiplier	8657 8.66		5245 5.24		15432 15.43		13151 13.15		32995 32.99		7032 7.03	
Trickle Up Effects to Large Farm Households (Rs) Multiplier		3516 3.52		2959 2.96		3364 3.35		15050 15.05		152505 152.5		6044 6.04

Household income per Rs. 1,000 capital (returns) in the cropping system follows closely the relative results of returns to factors. Excluding the Lower Castes-small, the household income for small farm households ranges from Rs. 22,072 for Chhettri-small to Rs. 99,383 for Hill Tribes-small and for large farm households ranges from Rs. 11,300 for Chhettri-large to Rs. 63,441 for Lower Castes-large.

Trickle down effects were the strongest for Lower Castes-large and the weakest for Chhettri-large. Trickle up effects were the strongest for Hill Tribes-small (excluding Lower Castes-small) and weakest for Chhettri-small.

Livestock. Direct and indirect effects of livestock activity by caste and farm size are presented in Table LI. For a Rs. 1,000 capital return, Tharu-small farmers have the highest direct and indirect effects on Factor Account (Rs. 25,171) followed by Hill Tribes-small (Rs. 20,278) indicating each Rs. 1.0 capital returns for livestock in Tharu-small is associated with Rs. 25 total factor returns and each Rs. 1.0 capital returns for livestock in Hill Tribes-small is associated with Rs. 20 total factor returns. Chhettri, Tharu, and Hill Tribes-small have the highest total factor returns per Rs. 1.0 of capital returns in livestock.

Similar trends exist for households in the Institution Account. Total income effects range from Rs. 26,105 for Tharu-small to Rs. 3,664 for Lower Castes-large. Chhettri, Tharu, and Hill Tribes-small appear to have the greatest total income effect per unit of capital returns in livestock activity. Lower Castes-large, Hill Tribes-large, Other Castes-small, and Brahman appear to have the lowest total income effect per unit of capital returns.

Trickle down effect is the highest for Chhettri-large (Rs. 11,338) and the lowest for Lower Castes-large (Rs. 1,770). These effects are mainly through hired wage payments. Brahman, Hill Tribes, and Lower Caste tend to use their

TABLE LI  
DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF CAPITAL RETURNS IN EACH  
LIVESTOCK ACTIVITY BY CASTE  
AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

	UNIT	LTK-BL	LTK-BS	LTK-CL	LTK-CS	LTK-TL	LTK-TS	LTK-HTL	LTK-HTS	LTK-LL	LTK-LS	LTK-OL	LTK-OS
		1	2	3	4	5	6	7	8	9	10	11	12
Capital Returns	Rs	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Capital Coefficient		0.238715	0.34593	0.09	0.123678	0.108766	0.062842	0.315	0.083235	0.46875	0.177941	0.17551	0.265647
Revenue	Rs.	4189	2891	10309	8086	9194	15913	3175	12014	2133	5620	5698	3764
FACTOR ACCOUNT													
Land		1627.2	1063.6	4169.1	3079.1	3589.2	6435.4	1114.6	4736.2	646.7	1893.5	2300.4	1441.7
Labor		3096.8	2268.8	8668.9	7543.6	7672.8	14240.3	2157.5	11769.3	1426.9	4457.8	4133.1	2842.1
Capital		1883.9	1638.7	3256.6	2850.2	2998.2	4495.6	1628.9	3772.9	1434.2	2085.6	2151.5	1801.9
TOTAL		6607.9	4971.16094	13472.9	14260.2	25171.3	4901.0	20278.4	3506.7	8436.8	8585.1	6085.7	
Capital RETURNS Multiplier		6.61	4.9716	13.47	14.26	25.17	4.90	20.28	3.51	8.44	8.59	6.09	
INSTITUTION ACCOUNT													
Brahman-Large		2086.0	406.7	1527.6	1202.3	1335.2	2354.7	420.1	1808.3	253.9	713.7	782.6	529.7
Brahman-Small		1497.4	2545.6	4003.4	3211.5	3339.1	5946.9	1055.5	4718.0	647.2	1838.1	1953.2	1333.0
Chhettri-Large		226.6	152.2	2342.3	462.4	513.0	901.7	161.9	687.4	95.9	275.1	301.3	203.8
Chhettri-Small		596.1	403.0	1641.6	3842.4	1342.6	2388.0	427.0	1846.8	245.9	727.6	798.5	526.2
Tharu-Large		208.8	138.7	538.9	418.4	3028.8	831.2	147.7	629.0	85.2	249.3	278.1	184.9
Tharu-Small		1083.0	720.9	3074.4	2271.9	2476.2	8639.6	772.6	3343.1	477.7	1337.6	1480.8	960.7
Hill Tribes-Large		33.1	22.3	83.5	65.3	71.7	126.0	1360.4	97.1	14.4	39.0	43.6	29.6
Hill Tribes-Small		489.4	333.1	1414.9	1085.0	1143.5	2027.7	355.7	5824.0	225.4	621.3	660.4	438.9
Lower Castes-Large		6.9	4.8	16.9	13.7	14.7	25.3	5.6	19.8	1277.0	7.9	9.4	6.2
Lower Castes-Small		199.8	132.1	614.5	424.6	455.9	821.8	148.6	604.1	87.4	2319.5	287.1	178.8
Other Castes-Large		113.5	75.8	286.1	218.1	253.6	442.3	81.4	329.8	48.6	132.0	1849.7	99.9
Other Castes-Small		206.0	138.7	588.6	424.7	456.6	809.8	156.8	612.4	86.9	246.1	288.1	1703.8
Community		223.0	155.6	526.5	435.5	498.2	790.5	184.6	635.9	118.6	256.1	284.1	184.1
TOTAL		6969.7	5229.3	16659.2	14075.6	14929.2	26105.5	5277.8	21155.6	3664.3	8764	9017.0	6379.5
Capital Returns Multiplier		6.97	5.23	16.66	14.08	14.93	26.11	5.28	21.16	3.66	8.76	9.02	6.38
Capital Returns Multiplier for Primary Households													
		2.09	2.55	2.34	3.84	3.03	8.64	1.36	5.82	1.28	2.32	1.85	1.7
Trickle Down Effects to Small Farm Households (Rs ) Multiplier													
		4071		11338		9214		2917		1770		5467	
		4.07		11.34		9.21		2.92		1.77		5.47	
Trickle Up Effects to Large Farm Households (Rs ) Multiplier													
			800		2379		4681		3571		1417		1054
			0.8		2.38		4.68		3.57		1.42		1.05

own labor resources to meet labor requirements while Chhettri and Tharu tend to use hired labor to take care of the animals during grazing.

Tharu-small produced the highest trickle-up effect (Rs. 4,681) followed by Hill Tribes-small (Rs. 3,571). Brahman-small had the lowest trickle up effect (Rs. 800). Capital returns multipliers and trickle up analysis indicate that those households not participating in the SFD program still benefit indirectly from the government program.

Private Fishery. Improved fish farming is a new enterprise developing in the area and is a capital intensive activity. Brahman (large and small), Chhettri (large and small), Tharu (large and small), and Other Castes-large are the households undertaking this enterprise. The direct and indirect effect of an extra unit of land exogenously made available (or the last unit of land) had a land rent multiplier for total factor returns ranging from Rs. 11.86 on Brahman-large farms to Rs. 29.90 on Tharu-small farms (Table LII). High factor returns associated with each rupee of land rent is because of high capital requirements and the associated returns. Direct and indirect returns to the Institution Account are highest for Brahman-small farms (Rs. 3,839.4) but because of the higher imputed direct land rent (Rs. 160), the highest land rent multiplier is for Tharu-small farms which has a lower direct land rent (Rs. 125).

Fishery enterprises have highest trickle down effects per unit of land rent on the Other Castes-large farms followed by Tharu-large and Chhettri-large. Similarly, trickle up effects were maximum from Tharu-small fishery enterprise followed by Brahman-small and Chhettri-small.

Fishery enterprises are capital intensive (Table LIII). The multipliers of Table LIII are significantly smaller than those in Table LII for total factor returns. This indicates that the total factor returns per rupee of opportunity cost for land is substantially less than the rupee of opportunity cost for capital.

TABLE LII  
DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF LAND IN PRIVATE FISHERY  
BY CASTE AND FARM SIZE,  
KUMROJ VILLAGE  
SYSTEM, 1988

		FshP-BL	FshP-BS	FshP-CL	FshP-CS	FshP-TL	FshP-TS	FshP-OL
UNIT		1	2	3	4	5	6	7
Land Unit	Katha	1	1	1	1	1	1	1
Revenue/Katha	Rs.	1375	2200	1950	2000	1969	1900	2200
Land Rent/Katha	Rs.	175	160	170	150	125	110	120
FACTOR ACCOUNT								
Land		422.8	806.7	607.0	762.5	644.0	730.0	600.1
Labor		490.8	921.1	656.6	864.1	754.9	785.9	784.1
Capital		<u>1161.5</u>	<u>1909.1</u>	<u>1548.9</u>	<u>1612.1</u>	<u>1632.0</u>	<u>1772.7</u>	<u>1802.1</u>
TOTAL		2075.1	3636.9	2812.5	3238.7	3030.9	3288.6	3186.4
Land Rent Multiplier		11.86	22.73	16.54	21.59	24.25	29.90	26.55
INSTITUTION ACCOUNT								
Brahman-Large		1173.5	246.7	174.4	225.4	203.0	224.3	191.4
Brahman-Small		316.6	2272.6	411.7	522.7	438.5	478.0	470.5
Chhettri-Large		49.5	89.2	1503.0	83.5	77.4	85.0	75.9
Chhettri-Small		122.7	224.2	161.0	1623.4	176.8	186.4	192.1
Tharu-Large		44.0	80.8	59.1	75.6	1510.1	77.5	66.9
Tharu-Small		221.3	406.8	298.6	381.6	344.3	1931.9	352.9
Hill Tribes-Large		7.8	13.7	10.5	12.4	10.8	11.8	11.8
Hill Tribes-Small		99.7	180.7	135.5	166.4	156.3	155.2	159.3
Lower Castes-Large		1.9	3.2	2.6	2.8	2.6	2.6	3.3
Lower Castes-Small		43.9	76.6	59.2	71.9	64.9	63.4	75.3
Other Castes-Large		27.0	49.2	36.4	47.2	43.1	46.4	1650.5
Other Castes-Small		48.2	83.1	63.3	73.2	66.7	64.9	81.5
Community		74.7	112.5	106.8	106.9	121.3	101.8	112.4
TOTAL		<u>2230.9</u>	<u>3839.4</u>	<u>3022.1</u>	<u>3393.0</u>	<u>3215.7</u>	<u>3429.4</u>	<u>3443.8</u>
Land Rent Multiplier		12.75	24.00	17.78	22.62	25.73	31.18	28.70
Land Rent Multiplier for Primary Households		6.71	14.20	8.84	10.82	12.10	17.56	13.75
Trickle Down Effects to Small Farm Groups (Rs.)		853		1129		1247		1330
Multiplier		4.87		6.64		9.97		11.08
Trickle Effects to Large Farm Groups (Rs.)			483		446		549	
Multiplier			3.02		2.97		4.99	

Table LIII shows, however, that other than Chhettri-small, the Brahman-small fishery enterprise had the highest capital returns multiplier for Factor Account and Institution Account. It implies that each rupee of capital returns is associated with Rs. 2.42 total factor returns, and Rs. 2.56 total income to the various household institutions. For both Factor and Institution Accounts direct and indirect effects of capital returns to fish farming was lowest for Other Castes-large farmer (Rs. 2.15 and Rs. 2.33).

Almost all large farms involved in fish farming activity produced similar trickle down effects (Rs. 9,000 for Rs. 1,000 capital returns) on small farms. Similarly, all small farms had similar trickle-up effects.

Private Forestry. Forestry is also a new enterprise that is gaining popularity in the area. Direct and indirect income analysis of this enterprise is given in Tables LIV and LV. Budget information is very similar for all castes and all farm sizes and hence the direct and indirect effects associated with both the Factor Account and the Institution Account are similar. In general, however, small farms tend to have greater multiplier effects on total factor returns and total income generation per unit of resource opportunity cost than exists for large farms. The rental cost of one bigha of land put into a private forestry enterprise returns from 4.3 to 5.5 times that rental cost in household income for small farms both directly and indirectly.

For the marginal capital returns of Rs. 1,000 to each caste and farm size, the total effect on Factor Account ranges from Rs. 3,673 on Chhettri-large to Rs. 9,474 on Lower Castes-large. Similar effects are reflected by capital returns multipliers for the Institution Account.

Ploughing and Transport (PATA). This activity is important to each household involved in farming but it is more important to those groups providing the activity on a rent basis. Because the activity is labor intensive, it is important



TABLE LIII

DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF CAPITAL IN PRIVATE FISHERY  
BY CASTE AND FARM SIZE,  
KUMROJ VILLAGE  
SYSTEM, 1988

		FshP-BL	FshP-BS	FshP-CL	FshP-CS	FshP-TL	FshP-TS	FshP-OL
UNIT		1	2	3	4	5	6	7
Capital Returns	Rs.	1000	1000	1000	1000	1000	1000	1000
Capital Coefficient	Bigha	0.688541	0.681818	0.656153	0.625	0.660317	0.747368	0.672727
Revenue	Rs.	1452	14677	1548	1600	1514	1338	1486
FACTOR ACCOUNT								
Land		446.6	537.8	481.8	7625.4	495.4	514.1	405.5
Labor		518.4	614.1	521.1	8640.5	480.7	553.4	529.8
Capital		<u>1226.8</u>	<u>1272.7</u>	<u>1229.2</u>	<u>16120.7</u>	<u>1255.4</u>	<u>1248.4</u>	<u>1217.6</u>
TOTAL		2191.8	2424.6	2232.1	32386.7	2331.5	2315.9	2153.0
Capital Multiplier		2.19	2.42	2.23	32.39	2.33	2.32	2.15
INSTITUTIONAL ACCOUNT								
Brahman-Large		1239.5	164.4	138.4	2254.1	156.1	158.0	129.4
Brahman-Small		334.4	1515.1	326.8	5226.9	337.3	336.6	317.9
Chhettri-Large		52.2	59.5	1192.8	835.5	59.6	59.9	51.3
Chhettri-Small		129.6	149.5	127.8	16234.0	136.0	131.3	129.8
Tharu-Large		46.5	53.9	46.9	756.0	1161.6	54.6	45.2
Tharu-Small		233.8	271.2	237.0	3815.6	264.8	1360.5	238.5
Hill Tribes-Large		8.2	9.1	8.3	123.9	8.3	8.3	8.0
Hill Tribes-Small		105.3	120.5	107.6	1663.8	120.2	109.3	107.7
Lower Castes-Large		2.0	2.2	2.0	28.4	2.0	1.8	2.2
Lower Castes-Small		46.4	51.1	47.0	719.0	49.9	44.7	50.9
Other Castes-Large		28.5	32.8	28.9	471.8	33.1	32.7	1115.2
Other Castes-Small		50.9	55.4	50.3	731.7	51.3	45.7	55.1
Community		<u>78.9</u>	<u>75.0</u>	<u>84.8</u>	<u>1069.0</u>	<u>93.3</u>	<u>71.7</u>	<u>75.9</u>
TOTAL		2356.2	2559.6	2398.5	33929.6	2473.6	2415.1	2326.9
Capital Multiplier		2.36	2.56	2.40	33.93	2.47	2.42	2.33
Capital Rent Multiplier for Primary Households		1.24	1.51	1.19	1.29	1.16	1.36	1.11
Trickle Down Effects to Small Farm Groups (Rs.)		900.33		896.34		959.58		899.90
Multiplier		0.90		0.90		0.96		0.90
Effects to Large Farm Groups (Rs.)			321.92		357.50		315.32	
Multiplier			0.32		0.36		0.32	

TABLE LIV

DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF LAND IN PRIVATE FORESTRY BY  
CASTE AND FARM SIZE, KUMROJ  
VILLAGE SYSTEM, 1988

	FrsP-BL	FrsP-BS	FrsP-CL	FrsP-CS	FrsP-TL	FrsP-TS	FrsP-HTL	FrsP-HTS	FrsP-LL	FrsP-LS	FrsP-OL	FrsP-OS
UNIT	1	2	3	4	5	6	7	8	9	10	11	12
Land Unit	Bigha	1	1	1	1	1	1	1	1	1	1	1
Revenue/Bigha	Rs	12750	12700	13010	12750	12640	12760	13670	12970	139000	13400	13400
Land Rent/Bigha	Rs	2000	2100	2000	2000	2000	2100	2000	130	2000	2000	2000
1850												
FACTOR ACCOUNT												
Land	4154 6	4752 3	3904 3	4680 0	4111 5	5207 4	4230 9	5105 2	4545 2	5276 7	4213 4	4518
Labor	6774 4	7274 4	6373 1	7049 6	6696 8	7307 6	6989 1	7745 8	8149 9	8110 7	7642 2	7065
Capital	6002 6	6145 2	6018 8	6083 5	5733 5	6252 3	6840 3	6629 0	6252 9	6073 8	5522 4	6374
TOTAL	16931 6	18171 9	16296 2	17813 1	16541 8	18767 3	18060 3	19479 9	18948 0	19461 3	17378 1	17959
Land Rent Multiplier	8 47	8 65	8 15	8 91	8 27	8 94	9 03	10 64	9 47	9 73	8 69	9 70
INSTITUTIONAL ACCOUNT												
Brahman-Large	7887 3	1092 5	839 2	1041 2	927 2	1182 4	995 4	1243 5	1070 6	1196 8	947 7	1081
Brahman-Small	2642 1	11633 7	2332 5	2741 1	2290 2	2764 1	2823 2	3094 1	3013 8	2757 8	2853 1	2815
Chhettri-Large	369 5	412 3	7709 8	403 6	372 8	467 1	399 7	474 7	423 9	470 9	393 9	440
Chhettri-Small	1125 1	1071 1	1000 8	8584 2	973 5	1119 2	1263 9	1212 9	1239 8	1068 2	1293 4	1143
Tharu-Large	309 4	353 2	279 9	346 3	7914 5	407 4	339 0	414 0	348 1	406 5	325 8	365
Tharu-Small	2262 0	1965 1	2048 3	2265 5	2013 6	10584 4	2547 9	2382 8	2694 5	2072 5	2706 8	2271
Hill Tribes-Large	56 8	62 8	52 3	59 4	51 2	63 9	7414 9	67 4	63 1	67 2	58 3	65
Hill Tribes-Small	1039 9	888 6	955 0	1008 7	939 8	987 1	1186 0	9348 7	1261 2	877 5	1240 5	1009
Lower Castes-Large	14 8	15 8	13 5	14 3	13 2	14 9	18 1	15 9	7055 4	15 0	16 4	16
Lower Castes-Small	582 7	405 9	531 1	542 8	470 5	470 5	675 9	500 2	655 2	10015 2	745 2	530
Other Castes-Large	186 8	210 2	170 6	204 7	192 7	240 2	203 5	243 7	213 5	240 3	5992 3	214
Other Castes-Small	548 8	441 8	486 2	499 1	447 6	458 5	646 3	498 8	588 7	410 1	674 9	8151
Community	574 5	555 6	587 7	569 8	643 4	571 0	706 0	589 3	617 7	561 1	560 8	508
TOTAL	17599 5	19108 6	17006 9	18280 8	17250 2	19330 8	19219 7	20086 0	19245 5	20159	17809 1	18612
Land Rent Multiplier	17 60	19 11	17 01	18 28	17 25	19 33	19 22	20 09	19 25	20 16	17 81	18 6
Capital Rent Multiplier for Primary Household	1 69	18 13	5 06	11 55	3 46	6 25	2 89	8 32	2 65	7 45	1 07	2 50
Trickle Down Effects to Small Farm Groups (Rs ) Multiplier	2899 52 2 90		21503 81 21 50		10896 24 10 90		11379 24 11 38		7911 98 7 91		1260 03 1 26	
Trickle Up Effects to Large Farm groups (Rs ) Multiplier		6216 92 6 22		4627 32 4 63		2053 96 2 05		2942 91 2 94		3120 37 3 12		1546 19 1 55

TABLE LV

DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF CAPITAL RETURNS IN PRIVATE  
FORESTRY BY CASTE AND FARM  
SIZE, KUMROJ VILLAGE  
SYSTEM, 1988

	FrsP-BL	FrsP-BS	FrsP-CL	FrsP-CS	FrsP-TL	FrsP-TS	FrsP-HTL	FrsP-HTS	FrsP-LL	FrsP-LS	FrsP-OL	FrsP-OS
UNIT	1	2	3	4	5	6	7	8	9	10	11	12
Land Rent	Rs 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Capital Coefficient	0.196078	0.318897	0.341026	0.215686	0.210526	0.196721	0.195121	0.193548	0.153846	0.194029	0.194029	0.1764
Revenue	Rs 5100	3136	2932	4636	4750	5083	5125	5167	6500	5154	5154	5660
<b>FACTOR ACCOUNT</b>												
Land	1661.8	1173.4	880.0	1701.8	1545.1	2074.5	1586.2	2033.7	2272.6	2029.5	1620.6	2035.0
Labor	2709.8	1796.2	1436.4	2563.5	2516.6	2911.2	2620.3	3085.6	4074.9	3119.5	2939.3	3182.0
Capital	2401.1	1517.3	1356.6	2212.2	2154.6	2490.8	2564.5	2640.7	3126.5	2336.1	2124.0	2871.0
TOTAL	6772.7	4486.9	3673.0	6477.5	6216.3	7476.5	6771.0	7759.9	9474.0	7485.1	6683.9	8089.0
Capital Returns Multiplier	6.77	4.49	3.67	6.48	6.22	7.48	6.77	7.76	9.47	7.49	6.68	8.00
<b>INSTITUTIONAL ACCOUNT</b>												
Brahman-Large	3154.9	269.7	189.1	378.6	348.4	471.0	373.2	495.43	535.3	460.3	364.5	487.0
Brahman-Small	1056.8	2872.5	525.7	996.8	860.6	1101.2	1058.5	1232.5	1506.9	1060.7	1097.3	1268.0
Chhettri-Large	147.8	1010.8	1737.7	146.8	140.1	186.1	149.9	189.1	212.0	181.1	151.5	198.0
Chhettri-Small	450.0	264.5	225.6	3121.5	365.8	445.9	473.8	483.2	619.9	410.8	497.5	515.0
Tharu-Large	123.8	87.2	63.1	125.9	2974.2	162.3	127.1	164.9	174.1	156.4	125.3	164.0
Tharu-Small	904.8	485.2	461.7	823.8	756.7	4216.6	955.3	949.2	1347.3	797.1	1041.1	1023.0
Hill Tribes-Large	22.7	15.5	11.8	21.6	19.2	25.5	2779.9	26.9	31.5	24.8	22.4	29.0
Hill Tribes-Small	416.0	219.4	215.2	366.8	353.2	393.2	444.6	3724.1	630.6	337.5	477.1	454.0
Low Caste-L	5.9	3.9	3.0	5.2	4.9	5.9	6.8	6.3	3527.7	5.8	6.3	7.0
Low Caste-S	233.1	100.2	119.7	197.4	176.8	187.5	253.4	199.3	327.6	3852.0	286.6	238.0
Others-Large	74.7	51.9	38.5	74.4	72.4	95.7	76.3	97.1	106.7	92.4	2304.7	96.0
Others-Small	219.5	109.1	109.6	181.5	168.2	182.7	242.3	198.7	294.4	157.7	259.6	3671.0
Community	229.8	137.2	132.5	207.2	241.8	227.5	264.7	234.8	308.8	215.8	215.7	228.0
TOTAL	7039.8	4718.2	3833.2	6647.6	6482.5	7701.0	7205.7	8001.4	9622.8	7754	6849.7	8384.0
Capital Returns Multiplier	7.04	4.72	3.83	6.65	6.48	7.70	7.21	8.00	9.62	7.75	6.85	8.3
Capital Returns Multiplier for Primary Household	3.15	2.87	1.74	3.12	2.97	4.22	2.78	3.72	3.53	3.85	2.3	3.6
Trickle Down Effects to Small Farm Groups (Rs ) Multiplier	3280.21 3.28		1657.50 1.66		2681.34 2.68		3427.87 3.43		4726.60 4.73		3659.20	
Trickle Up Effects to Large Farm Groups (Rs ) Multiplier		530.05 0.53		752.58 0.75		946.52 0.95		979.64 0.98		921.81 0.92		983.19 0.9

to those groups providing labor in the hired labor market. Brahman-small farmers show the highest total factor returns and income generated per Rs. 1,000 capital returns. The two household groups of Brahman-large and Other Castes-large had two tractors each and hence their results are very different from the other groups where the emphasis was more on transport than on ploughing. In general, small farm households have higher multiplier effects on factor returns and incomes. The overall effect of this activity on small-farm households seems to be profound in terms of generating incomes for those groups (Table LVI).

Trade and Services (TAS). Increased production and income in the study region has increased the role of trade and services. Capital is a very important component of this activity. Table LVII shows that for a marginal unit change in capital returns, the associated direct and indirect effects on the Factor and Institution Accounts favor Brahman-small, Chhettri-small, Tharu-small, and Lower Castes-small. For Brahman and Chhettri, business/trade is important while for Tharu-small, Hill Tribes-small and Lower Castes, occupational services (such as tailor, barber) are important.

Trickle down and trickle up effects are not as diverse as with the other activities.

### Commodity Account

A change in the commodity demand is associated with changes in all of the accounts and is measured by the interdependence coefficients contained in the columns of the commodity account. Hence, a one thousand rupee change in demand for paddy (for example) would change directly and indirectly the Activity Account, Commodity Account itself, Factor Account, Institution Account,

TABLE LVI

**DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF CAPITAL RETURNS BY CASTE AND  
AND FARM SIZE, KUMROJ VILLAGE  
SYSTEM, 1988**

	PATA-BL	PATA-BS	PATA-CL	PATA-CS	PATA-TL	PATA-TS	PATA-HTL	PATA-HTS	PATA-LL	PATA-LS	PATA-OL	PATA-OS
UNIT	1	2	3	4	5	6	7	8	9	10	11	12
Capital Returns Rs	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Capital Coefficient	0.274836	0.042765	0.051319	0.056715	0.079036	0.13	0.094117	0.089473	0.126984	0.082908	0.462211	0.16279
Revenue Rs	3639	23384	19486	17632	12652	7692	10625	11177	7875	12062	2164	6143
<b>FACTOR ACCOUNT</b>												
Land	910.3	8383.1	6716.1	6310.1	3268.0	2782.7	3513.1	3984.5	2416.8	4277.0	337.7	2067.2
Labor	2485.7	25455.1	19712.2	19213.5	10592.9	8046.1	10505.6	12744.9	7768.3	13101.7	968.6	5997.4
Capital	1553.2	5930.1	4819.7	4618.0	2972.4	2595.5	2985.1	3373.1	2493.3	3390.5	1248.1	2206.6
<b>TOTAL</b>	<b>4949.2</b>	<b>39768.3</b>	<b>31248</b>	<b>30141.6</b>	<b>16833.4</b>	<b>13424.3</b>	<b>17003.8</b>	<b>20102.6</b>	<b>12678.4</b>	<b>20769.2</b>	<b>2554.4</b>	<b>10271.1</b>
Capital Returns Multiplier	4.95	39.77	31.25	30.14	16.83	13.42	17.00	20.10	12.68	20.77	2.55	10.27
<b>INSTITUTIONAL ACCOUNT</b>												
Brahman-Large	1689.0	3154.2	2505.4	2335.6	1249.0	1032.2	1313.6	1495.7	915.4	1572.3	141.7	777.9
Brahman-Small	951.0	18127.7	6931.2	5937.1	3412.8	2522.1	3602.1	3739.8	2528.1	3908.2	399.5	2109.9
Chhettri-Large	132.5	1181.3	5065.1	887.4	478.2	395.2	500.5	558.2	345.7	601.0	56.6	298.1
Chhettri-Small	406.8	3403.4	3020.6	11551.7	1512.7	1017.7	1598.0	1461.6	1084.2	1559.3	175.4	905.0
Tharu-Large	119.6	1078.7	874.1	804.6	3460.2	360.7	458.4	508.6	311.4	544.0	49.3	268.8
Tharu-Small	806.4	6454.3	6062.2	4448.5	3115.7	6250.8	3225.3	2742.3	2256.7	2945.0	349.8	1809.7
Hill Tribes-Large	19.9	173.3	138.9	128.9	67.7	55.4	2893.0	80.2	51.0	86.2	8.7	43.7
Hill Tribes-Small	369.5	2954.8	2783.7	2006.1	1439.3	880.5	1468.9	8320.9	1041.6	1328.6	162.9	827.1
Lower Castes-Large	4.5	37.1	29.1	27.4	14.6	11.6	16.5	17.2	2650.8	17.7	2.4	9.4
Lower Castes-Small	192.1	1369.5	1443.4	889.9	761.2	379.0	787.7	525.5	538.3	7446.3	89.5	428.2
Other Castes-Large	67.6	592.3	476.8	443.4	242.1	199.0	254.9	283.1	176.0	299.2	1074.8	148.2
Other Castes-Small	173.7	1300.8	1262.7	861.4	654.5	364.8	697.2	520.6	463.1	551.5	82.9	2497.4
Community	162.6	1220.3	996.2	975.0	560.0	414.8	574.0	618.6	399.4	616.9	85.7	299.8
<b>TOTAL</b>	<b>5095.2</b>	<b>41047.6</b>	<b>31589.3</b>	<b>31297.0</b>	<b>16968.0</b>	<b>13883.5</b>	<b>17390.2</b>	<b>20872.2</b>	<b>12761.7</b>	<b>21476</b>	<b>2679.2</b>	<b>10423.2</b>
Capital Returns Multiplier	5.10	41.05	31.59	31.30	16.97	13.88	17.39	20.87	12.76	21.48	2.68	10.42
Capital Returns Multiplier for Primary Household	1.69	18.13	5.06	11.55	3.46	6.25	2.89	8.32	2.65	7.45	1.07	2.5
Trickle Down Effects to Small Farm Groups (Rs ) Multiplier	2899.52 2.90		21503.81 21.50		10896.24 10.90		11379.24 11.38		7911.98 7.91		1260.03 1.26	
Trickle Up Effects to Large Farm Groups (Rs ) Multiplier		6216.92 6.22		4627.32 4.63		2053.96 2.05		2942.91 2.94		3120.37 3.12		1546.19 1.55

TABLE LVII

DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
UNIT OF CAPITAL RETURNS IN TRADE AND SERVICES  
BY CASTE AND FARM SIZE, KUMROJ  
VILLAGE SYSTEM, 1988

	TAS-BL	TAS-BS	TAS-CL	TAS-CS	TAS-TL	TAS-TS	TAS-HTL	TAS-HTS	TAS-LL	TAS-LS	TAS-OL	TAS-OS
UNIT	1	2	3	4	5	6	7	8	9	10	11	12
Capital Returns	Rs 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Capital Coefficient	0.452727	0.18018	0.668478	0.204545	0.426829	1.233944	0.473333	0.652777	0.433333	0.305952	0.592307	0.63567
Revenue	Rs 2209	5550	1496	4889	2343	4275	2113	1532	2308	3268	1688	157
FACTOR ACCOUNT												
Land	460.2	1365.1	268.3	1265.3	502.6	1265.3	406.3	485.3	488.0	882.0	295.2	387.0
Labor	1722.7	5870.3	892.5	4121.3	1803.6	4561.3	1584.3	1108.3	1938.4	2949.7	1093.2	1002.0
Capital	1343.5	1949.6	1209.4	1792.0	1361.1	1717.8	1311.0	1281.8	1354.3	1449.3	229.3	250.0
TOTAL	3526.3	9185.1	2370	8178.5	3667.3	7544.3	3301.6	2875.4	3780.7	5280.9	1617.7	1640.0
Capital Returns Multiplier	3.53	9.19	2.37	8.18	3.67	7.54	3.30	2.88	3.78	5.28	1.62	1.60
INSTITUTIONAL ACCOUNT												
Brahman-Large	1816.5	582.2	125.8	507.4	219.7	481.7	198.3	184.5	203.1	316.7	136.7	160.0
Brahman-Small	551.3	5976.9	315.6	1227.4	493.3	1047.3	497.7	429.3	582.2	696.7	362.0	281.0
Chhettri-Large	76.7	205.4	1377.3	186.8	81.9	182.1	73.9	66.7	76.0	119.7	53.9	61.0
Chhettri-Small	225.3	545.2	124.6	4476.5	200.8	409.6	206.1	161.6	249.8	265.7	152.2	146.0
Tharu-Large	69.0	185.6	41.5	166.6	1962.9	164.8	66.3	60.7	65.1	106.7	46.9	53.0
Tharu-Small	445.1	1008.2	239.0	908.6	408.3	4634.0	386.7	308.8	558.9	510.0	292.4	278.0
Hill Tribes-Large	12.4	32.3	7.8	28.2	11.6	25.4	1720.4	9.8	11.8	17.6	8.7	9.0
Hill Tribes-Small	212.1	470.3	114.6	410.9	197.7	356.8	187.6	1565.1	264.6	215.6	138.5	126.0
Low Caste-L	3.2	8.0	2.0	6.8	3.0	5.8	3.6	2.2	1395.3	3.8	2.6	2.0
Low Caste-S	97.9	189.7	50.9	178.7	78.9	146.6	81.7	56.3	145.3	2977.2	68.1	55.0
Others-Large	50.5	125.0	28.0	109.2	51.9	101.9	46.7	37.5	40.4	63.6	1420.8	33.0
Others-Small	96.8	206.5	52.9	178.7	79.7	147.2	91.4	58.3	120.3	93.3	70.1	1434.0
Community	124.7	286.1	91.6	272.5	150.0	234.5	142.0	88.8	122.7	153.1	92.6	75.0
TOTAL	3781.5	9821.4	2571.7	8658.4	3939.7	7937.9	3702.6	3029.5	3835.5	5540.0	2845.4	2818.0
Capital Multiplier	3.78	9.82	2.57	8.66	3.94	7.94	3.70	3.03	3.84	5.54	2.85	2.80
Capital Rent Multiplier for Primary Household	1.82	5.98	1.38	4.48	1.97	4.63	1.72	1.56	1.39	2.98	1.42	1.4
Trickle Down Effects to Small Farm Groups (Rs ) Multiplier	1628 1.63		899 0.9		1459 1.46		1452 1.45		1921 1.92		1082 1.08	
Trickle Up Effects to Large Farm Groups (Rs ) Multiplier		1138 1.14		1005 1.00		902 0.90		361 0.36		629 0.63		23 0.3

and Financial Account. The interdependence coefficients associated with the Commodity Account are contained in Appendix Table D-2. The results of applying those interdependence coefficients to a marginal change in commodity demand of Rs. 1,000 are shown in Table LVIII for the Factor and Institution Accounts.

For a one rupee change in commodity demand, the highest total factor change (Rs. 1.66) occurred in the demand for milk and milk products and animal head. The range in the commodity multiplier for total factor use is from 1.06 for 'other foods' to 1.66 for milk and milk products. The commodity multiplier for income changes varies from 1.10 for 'other food' and cottage industry to 1.74 for milk and milk products.

The bottom part of Table LVIII presents the income change (percent times 1,000) by household group for a marginal change in commodity demand of Rs. 1,000. For example, a marginal change in paddy of Rs. 1,000 has the direct and indirect effect of changing Brahman-large by Rs. 201. When dividing this by Brahman-large total household income of Rs. 2,850,580 (Table XLVII), the percentage change in Brahman-large income is 0.00705. This procedure allows comparisons among household groups for the different commodity groups.

A change in demand for paddy is relatively of more benefit to large farmers than to small farmers, primarily because of the returns to land relative to labor. The same is true for mustard. However, maize and other food crops are relatively more important to small farmers in generating income.

Livestock and livestock products generate higher percentage changes in incomes of small farmers than in incomes of large farmers. The same is true for cottage type industries. A change in demand for fishery products would have greater income impacts on large farmers than small farmers.

TABLE LVIII

DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
COMMODITY DEMAND BY CASTE AND  
FARM SIZE, KUMROJ VILLAGE  
SYSTEM, 1988

Commodity	Paddy	Maize	Mustard	Other Food	Milk & Milk Products	Meat	Animal Head	Fishery	Ploughing Transport Service	Cottage Industry
Change in Exog Demand (Rs.) 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>FACTOR ACCOUNT (RS.)</b>										
Land-Own	669	697	713	467	373	315	366	280	292	197
Land-Leased	10	12	12	7	6	5	6	4	4	3
Labor-Own	370	299	407	261	645	566	699	387	642	355
Labor-Hired	222	227	234	150	173	147	201	106	244	143
Capital	249	255	265	171	466	336	285	709	301	372
<b>TOTAL</b>	<b>1519</b>	<b>1589</b>	<b>1632</b>	<b>1055</b>	<b>1662</b>	<b>1369</b>	<b>1657</b>	<b>1485</b>	<b>1483</b>	<b>1070</b>
Commodity Multiplier	1.52	1.59	1.63	1.06	1.66	1.37	1.66	1.48	1.48	1.07
<b>INSTITUTIONAL ACCOUNT (RS.)</b>										
Brahman-Large	201	212	212	139	193	143	166	297	155	74
Brahman-Small	418	477	442	319	620	429	507	236	372	237
Chhettn-Large	76	57	79	35	61	47	58	109	48	27
Chhettn-Small	170	175	182	117	179	150	188	90	157	71
Tharu-Large	74	61	69	39	53	49	40	107	49	24
Tharu-Small	319	302	323	241	281	274	343	345	349	346
Hill Tribes-Large	11	10	11	5	10	9	12	5	7	4
Hill Tribes-Small	119	150	151	76	146	153	174	210	174	217
Lower Castes-Large	2	2	2	1	2	2	5	1	2	1
Lower Castes-Small	48	64	65	32	53	53	66	29	60	28
Other Castes-Large	41	33	48	20	31	24	30	60	52	14
Other Castes-Small	53	57	59	40	63	47	67	31	58	29
Community	50	51	53	34	53	43	52	51	46	33
<b>TOTAL</b>	<b>1581</b>	<b>1652</b>	<b>1697</b>	<b>1097</b>	<b>1743</b>	<b>1431</b>	<b>1727</b>	<b>1573</b>	<b>1531</b>	<b>1104</b>
Commodity Multiplier	1.58	1.65	1.70	1.10	1.74	1.43	1.73	1.57	1.53	1.10
<b>Income Change (Percent X1000)</b>										
<b>INSTITUTION ACCOUNT</b>										
Brahman-Large	7.04	7.45	7.45	4.88	6.76	5.01	5.83	10.44	5.45	2.59
Brahman-Small	6.72	7.68	7.12	5.13	9.97	6.89	8.16	3.80	5.98	3.81
Chhettn-Large	7.10	5.25	7.34	3.25	5.71	4.36	5.35	10.12	4.45	2.54
Chhettn-Small	6.84	7.05	7.33	4.70	7.21	6.02	7.56	3.64	6.33	2.84
Tharu-Large	7.51	6.22	6.98	3.90	5.34	4.91	6.03	10.86	5.01	2.46
Tharu-Small	7.40	7.01	7.50	5.58	6.51	6.35	7.94	7.99	8.09	8.03
Hill Tribes-Large	5.62	5.39	5.82	2.74	5.15	4.53	6.04	2.76	3.81	2.02
Hill Tribes-Small	6.26	7.88	7.98	4.00	7.70	8.06	9.18	11.08	9.17	11.43
Lower Castes-Large	5.84	7.18	7.24	3.45	7.15	6.84	14.18	3.66	5.19	2.65
Lower Castes-Small	6.21	8.35	8.49	4.22	6.84	6.91	8.66	3.84	7.83	3.67
Other Castes-Large	7.14	5.71	8.33	3.46	5.37	4.23	5.25	10.58	9.16	2.46
Other Castes-Small	6.45	6.99	7.13	4.82	7.62	6.91	8.11	3.81	7.10	3.49
Community	3.73	3.85	3.99	2.55	3.98	3.27	3.94	3.81	3.50	2.46



### Factor Account

Labor is an important component of the Factor Account. Direct and indirect effects of employing an additional 100 mandays for the various labor categories (by caste and farm size) are shown in Table LIX. Wage rate per day was assumed equal for all labor categories at Rs. 23 (Row 1, Table LIX). In value terms, 100 mandays would be equal to Rs. 2,300. Direct and indirect effect of this change shows that small farmers in all castes benefitted relatively more than large farmers which is plausible because of the fact that small farmers depend more heavily on the labor resource. An increase in labor demand directly alters income levels in the Institution Account. As such, Hill Tribes-small have the largest impact on all in incomes followed by Tharu-small and Brahman-small.

The increase in hired labor demand has the greatest aggregate impact on incomes of Tharu-small, Brahman-small, Hill Tribes-small, and Chhettri-small.

TABLE LIX

DIRECT AND INDIRECT EFFECTS ON FACTOR AND  
INSTITUTION ACCOUNTS FOR THE MARGINAL  
EXOGENOUS CHANGE IN LABOR DEMAND  
BY CASTE AND FARM SIZE, KUMROJ  
VILLAGE SYSTEM, 1988

	LABR-BL	LABR-BS	LABR-CL	LABR-CS	LABR-TL	LABR-TS	LABR-HTL	LABR-HTS	LABR-LL	LABR-LS	LABR-OL	LABR-OS	LABR-HRD
Wage Rate/day	23	23	23	23	23	23	23	23	23	23	23	23	23
Change in Exog Demand(days)	100	100	100	100	100	100	100	100	100	100	100	100	100
Value Change	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300	2300
FACTOR ACCOUNT													
LAND	435.6	597.3	390.6	629.0	452.8	718.3	413.8	743.0	502.5	702.0	372.1	58.5	535.9
LABOR	3055.3	3205.4	3007.2	3181.2	3033.7	3199.3	3037.3	3260.4	3172.6	3145.7	2983.4	3139.0	3006.5
CAPITAL	351.7	435.9	333.9	412.0	3715.1	436.7	340.0	5462.8	440.9	392.7	323.0	40.3	338.4
TOTAL	3842.5	4238.7	3731.6	4222.2	3858.0	4354.4	3791.2	4466.2	4116.0	4240.4	3678.5	512.8	3880.9
Labor Demand Multiplier	1.671	1.843	1.622	1.836	1.677	1.893	1.648	1.942	1.790	1.844	1.599	1.799	1.69
INSTITUTIONAL ACCOUNT													
Brahman-Large	2499.4	245.2	181.7	242.5	204.8	268.3	199.9	277.8	219.0	251.7	172.4	23.6	203.7
Brahman-Small	500.5	2926.1	451.3	578.0	440.8	574.0	499.8	641.1	542.2	552.6	446.3	55.6	735.6
Chhettri-Large	75.0	88.4	2373.0	91.5	79.8	102.5	78.2	101.2	81.7	95.1	71.3	9.2	76.5
Chhettri-Small	189.5	224.4	172.6	2517.7	174.4	222.0	202.7	237.6	188.1	210.6	179.3	20.9	396.6
Tharu-Large	64.4	78.1	60.3	79.9	2374.0	92.2	67.8	91.6	68.5	84.8	60.2	7.8	68.1
Tharu-Small	333.5	396.6	316.0	397.2	340.5	2733.5	353.1	4464.	388.1	404.2	316.9	38.8	949.3
Hill Tribes-Large	12.5	14.0	11.8	13.9	11.2	14.3	2318.6	14.8	13.1	14.0	11.6	1.4	11.3
Hill Tribes-Small	156.9	180.9	150.8	174.7	163.6	187.9	170.1	2499.8	190.8	170.6	149.4	172.4	435.7
Low Caste-Large	3.3	3.5	3.1	3.3	2.9	3.2	4.1	3.4	2316.3	3.0	3.6	3.0	2.6
Low caste-Small	69.4	76.0	66.2	76.7	64.4	77.1	76.2	79.8	67.8	2377.5	70.3	7.7	307.3
Other-Large	39.9	47.0	37.4	47.6	43.4	54.8	41.4	54.4	43.7	50.6	2336.3	4.6	40.6
Other-Small	78.8	85.3	72.7	79.5	68.5	78.5	92.6	84.2	697	73.9	81.4	238.4	229.5
Community	141.2	130.3	146.3	140.6	162.6	134.1	169.9	136.7	144.3	121.9	133.2	11.6	103.5
TOTAL	4164.2	4495.9	4043.4	4443.1	4130.7	4542.5	4274.4	4668.8	4333.1	4410.5	4032.3	4377.5	3560.5
Labor Demand Multiplier	1.8	1.95	1.75	1.93	1.79	1.97	1.85	2.03	1.88	1.91	17.5	1.90	1.55

However, when shown as a percentage increase in incomes, the following results:

<u>Caste and Farm Size</u>	<u>Total Income Level (Rs 000)</u>	<u>Direct and Indirect Income Change from Rs 2300 Change in Hired Labor (Rs)</u>	<u>Percent Change in Income</u>
Brahman-large	2850.58	204	.0072
Brahman-small	6216.03	736	.0118
Chhettri-large	1075.70	76	.0071
Chhettri-small	2486.20	397	.0160
Tharu-large	984.22	68	.0069
Tharu-small	4312.30	949	.0220
Hill Tribes-large	190.55	11	.0058
Hill Tribes-small	1897.65	436	.0230
Lower Castes-large	34.31	3	.0087
Lower Castes-small	767.28	307	.0400
Other Castes-large	571.29	41	.0072
Other Castes-small	821.30	229	.0279

Lower Castes-small, Other Castes-small, Hill Tribes-small, and Tharu-small have significantly larger income increases than do Chhettri-small and Brahman-small. Similarly, large farms have one-fourth the change in incomes for a change in hired labor demand.

### Financial Account

Fixed price SAM multipliers are applied to the Financial Account to show income effects from loan transactions in the current account and from SFDP

investment credit programs in the capital account. Also, net trade and financial balances are estimated for the Kumroj Panchayat.

Current Account. The Financial Account was further disaggregated from what appears in Table XXXVI to include the following:

<u>Financial Account</u> (Rs. 000)	<u>Code</u>	<u>Receipts</u>	<u>Expenditures</u>
Loan Receipts			
Private	FA1		
Wealth	FA7	1345.00	
Institutions	(all)		600.00
Savings/Inv.(Priv.)	FA8	_____	<u>745.00</u>
Sub-Total		1345.00	1345.00
Public			
Rest-of-Nepal		1530.00	
Institutions	(all)		531.00
Savings/Inv.(Priv.)	FA8	_____	<u>999.00</u>
Sub-Total		1530.00	1530.00
Loan Repayment			
Principal-Private	FA3		
Institutions	(all)	604.00	
Wealth	FA7	_____	<u>604.00</u>
Sub-Total		604.00	604.00
Principal-Public	FA4		
Institutions	(all)	1490.60	
Rest-of-Nepal		_____	<u>1490.60</u>
Sub-Total		1490.60	1490.60

	<u>Code</u>	<u>Receipts</u>	<u>Expenditures</u>
Interest Pay -Private	FA5		
Institutions	(all)	362 90	253 10
Factors-Cap	(all)		28 50
Rest-of-Nepal		_____	<u>81.30</u>
Sub-Total		362 90	362 90
Interest Pay -Public	FA6		
Institutions	(all)	352 70	
Rest-of-Nepal		_____	<u>352 70</u>
Sub-Total		352 70	352 70
Wealth	FA7		
Principal-Priv	FA3	604 00	
Loan Recpt -Priv	FA1		1345 00
Sav /Inv -Priv	FA8	_____	<u>-741 00</u>
Sub-Total		604 00	604 00
Savings/Investment			
Private	FA8		
Institutions	(all)	2474 53	
Loan Recpt -Priv	FA1	745 00	
Loan Recpt -Pub	FA2	999 00	
Wealth	FA7	-741 00	
Rest-of-Nepal		-531 00	2466 13
Commodities	(all)		455 50
Factors-Cap	(all)	_____	<u>25 00</u>
Sub-Total		2946 53	2946 53

	<u>Code</u>	<u>Receipts</u>	<u>Expenditures</u>
Public	FA9		
Institutions	(all)	128.0	
Rest-of-Nepal		<u>          </u>	<u>128.0</u>
		128.0	128.0
		<u>          </u>	<u>          </u>
Total		9363.73	9363.73

The aggregations are consistent with the data as presented in Table XXXVI.

The direct and indirect effects associated with loan receipts (private and public) in the current account are presented in Table LX. Loan receipts (credit) of Rs. 1,345,000 received from the private sector are associated directly and indirectly with commodity purchases of Rs. 1,634,500 or about 3.82 percent of total commodity output. Loan receipts of Rs. 1,530,000 received from the public sector are associated with Rs. 1,526,100 commodity purchases or about 3.57 percent of total commodity output. The multiplier effects come about because credit is provided for purposes of augmenting (income) consumption and investment which in turn requires commodity purchases. The credit multiplier for commodity purchases is 1.22 for private sources of credit and 1.00 for public sources of credit. The differences are because of differences in the distribution of credit between consumption and investment and the attendant differences in commodity purchases from local suppliers versus imports.

The current account transactions of credit directly and indirectly augment incomes of households and the community. These effects are shown by the Institution Account in Table LX. For example, loan receipts from the private sector augmented incomes directly and indirectly of Brahman large farm

TABLE LX

DIRECT AND INDIRECT EFFECTS ON SELECTED  
COMMODITY, INSTITUTION, AND FINANCIAL  
ACCOUNTS FROM LOAN RECEIPTS OF  
THE PRIVATE AND PUBLIC SECTORS,  
KUMROJ PANCHAYAT SAM, 1988

	Loan Receipts (Private)		Loan Receipts (Public)		Total Loan Receipt	
Credit Amount (000 Rs)	1345.0		1530.0		2875	
	(000 Rs)	(%)	(000 Rs)	(%)	(Rs 000)	(%)
Commodity Account	1634.5	3.82	1526.1	3.57	3160.6	7.39
Credit Multiplier	1.22	--	1.00	--	2.22	--
Institution Account						
Brahman-large	111.2	3.90	151.0	5.30	262.2	9.20
Brahman-small	320.2	5.15	307.0	4.94	627.2	10.10
Chhettri-large	51.4	4.78	91.2	8.48	142.6	13.26
Chhettri-small	176.1	7.08	159.3	6.41	335.4	13.49
Tharu-large	49.5	5.03	70.9	7.20	120.4	12.23
Tharu-small	256.1	5.94	180.6	4.19	436.7	10.13
Hill Tribes-large	10.7	5.62	14.6	7.66	25.3	13.28
Hill Tribes-small	124.2	6.54	92.0	4.85	216.2	11.39
Lower Caste-large	5.2	15.16	4.2	12.24	9.4	27.40
Lower Caste-small	65.9	8.59	35.5	4.63	101.4	13.22
Other Caste-large	22.0	3.85	24.9	4.36	46.9	8.21
Other Caste-small	110.3	13.43	80.8	9.84	191.1	23.27
Community	40.5	3.05	39.4	2.97	79.9	6.02
Total	1343.3	5.71	1251.4	5.32	2594.7	11.03
Credit Multiplier	1.00	--	0.82	--	1.82	--
Financial Account						
Wealth	31.8	5.26	34.6	5.73	66.4	10.99
Savings-private	879.8	29.86	1132.7	38.44	2012.5	68.30
Savings-public	3.9	3.05	3.8	2.97	7.7	6.00

households by Rs. 111,200 or about 3.9 percent of total income of this household group. Loan receipts from the public sector augmented incomes of the same household group by Rs. 151,000 or 5.3 percent. Similar interpretations hold for the other household groups and community.

Differences in the magnitude of the income effects by household group depend on participation in credit programs, proportion of credit used for consumption versus investment, and indirect multiplier effects associated with purchases made with the credit. In general, small farmers had higher participation in private sector credit programs in 1988 and show higher percentages of associated income effects. Large farmers, however, had higher participation in public sector credit programs in 1988 and show higher percentages of associated income effects. The two exceptions are Lower Caste large farmers and Other Castes small farmers. In the former case, the small sample size and large borrowings of one farmer influenced the high loan receipts from both private and public sources for 1988. In the latter case, Other Castes small farmers were relatively heavy borrowers in both the private and public credit markets.

Selected results from the Financial Account are also presented in Table LX. Wealth effects associated with both private and public loan receipts (credit) amount to Rs. 66,400 or about 11 percent of the change in the Wealth Account. Wealth is the source of loan receipts for the private financial sector. However, loan receipts indirectly effect wealth in that loan receipts augment income and income is the source households use to make loan repayments that add to wealth. Thus an increase in loan receipts has an indirect effect on wealth.

Loan receipts have significant effects on private savings in that a large proportion of credit flows directly to savings for investment purposes. About 55



percent of private loan receipts and 65 percent of public loan receipts flow directly to savings. Thus the direct and indirect effects of private loan receipts account for about 30 percent of private savings and direct and indirect effects of public loan receipts account for another 38 percent of private savings for a total of 68 percent. Loan receipts are thus a significant source for augmenting Kumroj Panchayat savings and thus contributing to area investments.

Capital Account. The above analysis presents the current account contribution of the Financial Account. Of more importance is the long term contribution of the Financial Account by increasing capacity of the production activities through investment in the Kumroj Panchayat. Increased capacity in the production sectors along with increased demand for sector output employs more resources and thus increases incomes to households.

Loan funds made available for livestock in the current account SAM for 1988/89 by caste and farm size are presented in Appendix Table C-5. The sources of funds are private wealth, Nepal Bank Limited, and the SFDP for Kumroj Panchayat. But these are funds for only one year. Programs have made available funds in past years and for various purposes including consumption, cropping systems, livestock, ploughing and transport equipment, irrigation, and cottage industries Appendix Table C-4.

The analysis presented here is limited to livestock loans made available through the government SFDP and beginning with its inception in 1983/84. Livestock loans from the SFDP from 1983/84 to 1988/89 by caste and farm size are shown in Table LXI (taken from Appendix Table C-4). Some adjustment to the data was made to remove loan amounts for variable costs such as feed and other supplies. The SFDP is for small farmers. However, some of the farmers that were classified in the large farm category in 1983/84 were classified in the small farm category by 1987-89 and thus qualified for the SFDP. However, for

TABLE LXI  
LIVESTOCK LOANS FROM THE SMALL FARMERS  
DEVELOPMENT PROGRAM BY CASTE AND  
FARM SIZE FOR KUMROJ PANCHAYAT,  
1983/84 - 1988/89

(Rs. 000)							
Caste and Farm Size	Year						Total
	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	
Brahman							
Large					27	31	58
Small	13	32	111	181	208	242	787
Chhettri							
Large					5	4	9
Small		3	25	22	31	23	104
Tharu							
Large					3	4	7
Small	11	8	6	17	13	21	76
Hill Tribes							
Large							--
Small		3	1	10	20	26	60
Lower Castes							
Large					--	--	--
Small		12	8	5	23	46	94
Other Castes							
Large					--	--	--
Small				7			7
Total							
Large					35	39	74
Small	24	58	151	242	295	358	1128

the sample purpose they remained in the large farm category. Thus, about 6.2 percent of the total loan funds are shown as large farm classification versus 93.8 percent for small farms. By far the major loan amounts went to the Brahman caste (70.3 percent).

The loan amounts available to households for livestock need to be translated into changes in capacity for the livestock activities. The only capacity measure available in the SAM is in terms of value of output. Capital contribution to value of output is measured by capital returns. Thus a measure of change in capacity of the livestock activities through investment in livestock must be measured in annual returns to livestock. The assumption is made that gross capital returns must at least cover interest costs of livestock loans (15 percent) and replacement costs (12 percent). Thus annual gross returns to capital investments in livestock are assumed to be at least 27 percent. Using this rate, the estimated capital returns from livestock investments shown in Table LXI are presented by livestock activity in Table LXII.

Direct and indirect effects of credit disbursed for livestock purposes from the SFDP are presented for the Factor and Institution Accounts in Table LXII. Brahman-small farms have the highest direct and indirect effects (Rs. 1,056,400) on total factor returns followed by Tharu-small (Rs 516,000), Chhettri-small (Rs. 378,600), Hill Tribes-small (Rs. 328,500), Lower Caste-small (Rs 214,200), and Brahman-large (Rs. 103,800). For the rest of the households it was quite small or zero. This effect is in line with the amount of credit that flowed to these households. Each one rupee credit for investment in livestock for Tharu-small households was associated with highest total factor returns (Rs. 25.17) while it was lowest for Brahman-small (4.97). Similar trends existed in the case of livestock credit effects on the Institution Account. Brahman-small generated the most income (Rs. 1,111,300). Hill Tribes-large, Lower Castes-

TABLE LXII

**DIRECT AND INDIRECT EFFECTS OF THE SMALL FARMERS  
DEVELOPMENT PROGRAM FOR LIVESTOCK CREDIT ON  
FACTOR AND INSTITUTION ACCOUNTS BY CASTE  
AND FARM SIZE, KUMROJ PANCHAYAT, 1988**

		LTK-BL	LTK-BS	LTK-CL	LTK-CS	LTK-TL	LTK-TS	LTK-HTL	LTK-HTS	LTK-LL	LTK-LS	LTK-OL	LTK-OS
UNIT		1	2	3	4	5	6	7	8	9	10	11	12
Capital Returns	Rs 000	15 7	212 5	24	28 1	1 9	20 5	0 0	16 2	0 0	25 4	0 0	1 9
Capital Return Coefficient		0.23872	0.34593	0.09700	0.12368	0.10877	0.06284	0.31500	0.08324	0.46875	0.17794	0.17551	0.26565
Revenue	Rs 000	65 8	614 3	24 7	227 2	17 5	326 2	0 0	194 6	0 0	142 7	0 0	7 2
<b>FACTOR ACCOUNT</b>													
Land		25 6	226 0	10 0	86 5	6 8	131 9	0 0	76 7	0 0	48 1	0 0	2 8
Labor		48 6	482 1	20 8	212 0	14 6	291 9	0 0	190 6	0 0	113 2	0 0	5 4
Capital		29 6	348 2	7 8	80 1	5 7	92 2	0 0	61 1	0 0	53 0	0 0	3 4
TOTAL		103 8	1056 4	38 6	378 6	27 1	516 0	0 0	328 5	0 0	214 2	0 0	11 6
Capital (Credit) Multiplier		6 61	4 97	16 07	13 47	14 29	25 17	--	20 28	--	8 43	--	6 13
<b>INSTITUTIONAL ACCOUNT</b>													
Brahman-Large		32 8	86 4	3 7	33 8	2 5	48 3	0 0	29 3	0 0	18 1	0 0	1 0
Brahman-Small		23 5	541 0	9 6	90 2	6 4	121 9	0 0	76 4	0 0	46 7	0 0	2 5
Chhettri-Large		3 6	32 3	5 6	13 0	1 0	18 5	0 0	11 1	0 0	7 0	0 0	0 4
Chhettri-Small		9 4	85 6	3 9	108 0	2 6	49 0	0 0	29 9	0 90	18 5	0 0	1 0
Tharu-Large		3 3	29 5	1 3	11 8	5 8	17 0	0 0	10 2	0 0	6 3	0 0	0 4
Tharu-Small		17 0	153 2	7 4	63 8	4 7	177 1	0 0	54 1	0 0	34 0	0 0	1 8
Hilli Tribes-Large		0 5	4 7	0 2	1 8	0 1	2 6	0 0	1 6	0 0	1 0	0 0	0 1
Hilli Tribes-Small		7 7	70 8	3 4	30 5	2 2	41 6	0 0	94 3	0 0	15 8	0 0	0 8
Lower Caste-Large		0 1	1 0	0 0	0 4	0 0	0 5	0 0	0 3	0 0	0 2	0 0	0 0
Lower Caste-Small		3 1	28 1	1 5	11 9	0 9	16 8	0 0	9 8	0 0	58 9	0 0	0 3
Other Castes-Large		1 8	16 1	0 7	6 1	0 5	9 1	0 0	5 3	0 0	3 4	0 0	0 2
Other Castes-Small		3 2	29 5	1 4	11 9	0 9	16 6	0 0	9 9	0 0	6 2	0 0	0 3
Community		3 5	33 1	1 3	12 2	0 9	16 2	0 0	10 3	0 0	6 5	0 0	0 4
TOTAL		109 5	1111 3	39 9	395 5	28 4	535 1	0 0	342 7	0 0	223	0 0	12 2
Capital (Credit) Multiplier		6 97	5 23	16 63	14 08	14 96	26 10	--	21 15	--	8 76	--	6 42
<b>Capital (Credit) Multiplier for Primary Households</b>													
		2 09	2 54	2 34	3 84	3 05	8 64	0	5 82	0	2 32	0	1 74
<b>Trickle Down Effects to Small Farm Households (Rs.)63 90</b>													
Multiplier		4 01		27 20		17 70		0		0		0	
				11 34		9 31		0		0		0	
<b>Trickle Up Effect to Large Farm Households (Rs )</b>													
Multiplier			170 00		66 90		96 00		57 8		36 0		2 1
			0 80		2 38		4 68		3 57		1 42		1 10

large, and Other Castes-large did not participate in the livestock credit program. Multiplier effects were highest for Tharu-small households (26.10) and lowest for Brahman-small (5.23).

Direct household capital multipliers for livestock credit indicate that multiplier effects are strongest for Tharu-small, followed by Hill Tribe-small, Chhettri-small, Tharu-large, Brahman-small, Chhettri-large, Lower Caste-small, Brahman-large, and Other Castes-large. Brahman-large produced the highest trickle-down effect followed by Chhettri-large, and Tharu-large. Tharu-small produced maximum trickle-up effect followed by Hill Tribe-small and Chhettri-small.

These results indicate that the Brahman-small had the largest credit use for the livestock sector among all household groups. The total effect of the livestock credit program under the SFDP had on household income for each household group is determined by adding the individual effects across all columns for a particular caste and farm size given in Table LXII. The results of this are presented as column (2) in Table LXII.

These results indicate that Brahman-small farm had the highest total income effect (Rs 918,200) but that Lower Castes-small farm had the highest percentage of income effect (17.1 percent). This is probably due to the indirect effects of activities such as grass collecting for which Lower Castes-small farm households dominate. Small farm households show the highest percentage effects on incomes from the livestock credit program. However, large farm households show considerable impacts even though the direct effects of the credit program are minimal.

Financial Balance. Data from the trade and financial accounts are put together in Table LXIV to show the village system trade and financial balances. For the trade balance, exports are compared to imports to show that the village

TABLE LXIII

TOTAL INCOME EFFECTS OF LIVESTOCK CREDIT  
UNDER THE SMALL FARMERS DEVELOPMENT  
PROGRAM BY CASTE AND FARM SIZE,  
KUMROJ PANCHAYAT, 1988

Caste and Farm Size	Total Income Level (Rs.000) (1)	Direct and Indirect Income Change from the SFDP Livestock Credit (Rs 000) (2)	Percent of Total Income (3)
Brahman-large	2850.58	255.9	9.0
Brahman-small	6216.03	918.2	14.8
Chhettri-large	1075.70	92.5	8.6
Chhettri-small	2486.20	308.8	12.4
Tharu-large	984.22	85.6	8.7
Tharu-small	4312.30	513.1	11.9
Hill Tribes-large	190.55	12.6	6.6
Hill Tribes-small	1897.65	267.1	14.1
Lower Castes-large	34.31	2.5	7.3
Lower Castes-small	767.28	131.3	17.1
Other Castes-large	571.29	43.2	7.6
Other Castes-small	<u>821.30</u>	<u>82.9</u>	<u>10.1</u>
Total	22,207.41	2,713.7	12.2

TABLE LXIV  
TRADE AND FINANCIAL BALANCE FOR THE  
KUMROJ PANCHAYAT, 1988

(Rs. 000)

Trade Balance			
Imports		Exports	
Material Inputs	5,422.54	Commodities	12,677.80
Commodities			
Consumption	3,561.35		
Capital Formation	1,268.13		
Total	<u>10,252.02</u>	Total	<u>12,677.80</u>
Trade Balance + Rs 2,425.78			
Financial Balance			
Labor Receipts	613.30	Labor Payments	264.50
Institution Receipts	614.93	Institution Payments	789.55
Loan Repayment Receipts		Loan Payment	1,530.00
Principal	1,490.60	Savings/Invest.	-531.00
Interest	434.00		
Savings/Investment	1,326.00		
Total	<u>4,478.83</u>	Total	<u>2,053.05</u>
Net Financial Balance - Rs. 2,425.78			
Total	14,730.85	Total	14,730.85

system has a trade surplus of Rs. 2,425,780. All export and import data are as presented previously with one exception. The expenditures of the Savings/Investment column for RON are allocated to capital formation imports and capital outflows (see Appendix Table C-6). The quantity of capital formation imports (Rs. 1,268,130) are included in the trade balance as presented in Table LXIV.

The financial balance is constructed by showing the labor receipts and payments, institution receipts and payments, and the other RON flows from the Financial Accounts. There is an outflow of savings of Rs. 1,326,000 for the 1988 period. The net financial balance (deficit) for the village system is Rs. 2,425,780 which is the mirror image of the trade balance (surplus). This means the Kumroj Panchayat is a net creditor to the Rest-of-Nepal. It in essence finances development of other sectors in the Rest-of-Nepal.



## CHAPTER VI

### SUMMARY AND CONCLUSIONS

#### Summary

##### Problem Statement

The rural economy in Nepal is important in terms of its contribution to gross national product and employment. A majority of the population lives in rural areas and depends on the agrarian economy with its skewness in resource ownership and income distribution. Population of the country is further segmented by region (hill and plain ), by culture (Hill culture and Tarai culture), and by caste ( Brahman, Chhettri, Hill Tribes, Tarai Tribes or Tharu, Lower Castes, and Other Castes). Caste is an institution structure well established in the Hindu society. This structure, though weakened over time, still holds significance in distribution of power, wealth, and human capital.

In comparison with the hill regions, Tarai (plain) has more productive land and better infrastructural facilities. It is densely populated with people of local origin and migrants from the hill regions and India. Thus, very often Tarai represents a multi-racial, multi-cultural, and multi-lingual society.

To improve living conditions of the rural poor, the government has recognized the importance of development projects which address their multi-dimensional socio-economic problems. The Small Farmers Development Program (SFDP) is one such project.

Rural development efforts, in general, are targeted to rural population groups without bias towards any caste. Studies indicate, however, that inherent characteristics and cultural differences prevailing among castes may lead to biased results from development projects. The overall purpose of this study is to better understand the basis of income distribution by caste and farm size in a village panchayat (system) under the SFDP in the Tarai region in Nepal.

### Objective of the Study.

The overall objective of this study is to structure a village level economy in the Tarai region of Nepal and to empirically estimate the structure by means of a Social Accounting Matrix (SAM) for purposes of evaluating household income distribution by caste and farm size. Specific objectives of the study include: 1) formulation of a village level SAM identifying households by caste and farm size; 2) empirical estimation of the village system SAM in the Tarai region; 3) utilization of the SAM to analyze income distribution effects by caste and farm size associated with structural conditions in the village system economy; and 4) utilization of the SAM to evaluate household (caste and farm size) and community effects associated with government programs such as the SFDP and with private and public credit programs.

### Procedure

To achieve the objectives, a SAM for the Kumroj Panchayat village system was constructed. The SAM has five endogenous accounts (Activity, Commodity, Factor, Institution, and Financial) and one exogenous account (Rest-of-Nepal). Fifteen production activities were identified to exist in the area. Disaggregating the activities by caste and farm size (small and large), a total of

127 activities are contained in the Activity Account. Twenty-six commodities are entered in the Commodity Account. Factors (land, labor, and capital) were disaggregated by caste and farm size. Land leased and labor hired are additional factor identifications. Thus there are 38 categories in the Factor Account in all. Six caste groupings represented by two farm sizes in each plus community formed thirteen categories in the Institution Account. The credit market was disaggregated by private and public sources for loan receipts, loan principal repayments, and loan interest payments. Private and public savings/investment and a private wealth account complete the nine categories in the Financial Account. Rest-of-Nepal (RON) Account includes exports, imports, extra-regional financial markets, and transfer activities.

Survey data from households and village offices in the Kumroj Panchayat were utilized in estimating the SAM. The sample survey covered input-output data for all private and community level activities, income from off-farm sources, consumption expenditures, lending/borrowing, and saving/investment. An extensive set of enterprise budgets are presented in Appendix B.

The 'Make Matrix' contains output of all activities as determined by survey data. Enterprise budget data form the 'Use Matrix' and are used to estimate factor payments to land, labor, and capital. Returns to factors from on-farm and off-farm sources were distributed to households as income. Households also received income from internal (inter-institution) transfer and transfer from RON as remittances. Commodity purchases by households, by community, and as capital formation were estimated from the survey data. Differences between commodity production and consumption were balanced by imports and exports.

Each of the accounts in the SAM is presented as receipts and expenditures and analyzed in the appropriate context of production activities, commodity markets, factor markets, income formation and expenditure, and external linkages. Direct income formation is analyzed as factor (land rent, wages, and capital returns) and non-factor income, income by rural and non-rural activity, and institution income (caste, farm size, and community).

A linear model of the SAM is constructed identifying endogenous and exogenous accounts. A matrix of interdependence coefficients is computed where the row totals of the endogenous accounts are made linear functions of the elements in the exogenous accounts. For this model, prices were assumed fixed and expenditures of the endogenous accounts have unitary elasticities. The interdependence coefficients indicate the total change (direct and indirect) in each endogenous row account as a result of a one unit change in any row element of the exogenous account.

SAM multipliers, thus derived, are used to determine the impact on the Factor (resource) and Institution (income) Accounts for 1) the marginal land unit in each of the cropping systems and fishery and forestry activities; 2) the marginal unit of capital returns in eight selected production group activities; 3) marginal changes in commodity demand; 4) the marginal unit of employment; and 5) the marginal unit of credit.

### Empirical Results

Village Population. Population of the Kumroj Panchayat village system was 5,058 in 1983 and increased to 6,522 in 1989 (Table II). The number of households was 750 in 1983 and 924 in 1989 for a 23.2 percent increase (Table I). Chhettri, Brahman, and Hill Tribes gained relatively in proportion of

community households and Other Castes, Lower Castes, and Tharu lost relatively in proportion of community households. About one-third (32.0 percent) of the households were Brahman, 27.1 percent Tharu, 14.4 percent Chhettri, 14.1 percent Hill Tribes, 7.1 percent Lower Castes, and 5.3 percent Other Castes. In 1983, 69 percent of the households were small landholders, 18 percent were landless, and 13 percent were large landholders. Brahman made up over 50 percent (51 percent) of the large landholders.

The village system in total had 1,219.7 bighas (1 bigha = 1.67 acres) of cultivated land in 1988/89. The average per smallholder was 1.2 bighas and the average per largeholder was 4.4 bighas. This indicates that the 13.3 percent large landholders had about 36.2 percent of the cultivated land and 86.7 percent of the small landholders and landless had 63.8 percent of the land. Large landholders leased-out a net of 41.8 bighas of land and small landholders leased-in a net of 45.8 bighas (school land equalled 4.0 bigha). About 89.2 percent of large landholder area was irrigated versus 76.1 percent for small landholder area.

Aggregate SAM Accounts. The major account categories in the Kumroj Panchayat SAM are Activity, Commodity, Factor, Institution, Financial, and Rest-of-Nepal. A brief summary of aggregate account results are presented here where aggregation occurs across caste and farm size.

Receipts of the Activity Account is equal to Rs. 39,177,150 and is the summation of 15 production activities. Cropping systems account for 46.1 percent of all receipts. Livestock, milling, and 'other services' each account for 10 percent or more of total activity receipts. Expenditures of the Activity Account include value added (52 percent), locally produced intermediate inputs (34 percent), and imported material inputs (14 percent).

The Commodity Account includes 27 categories. Commodity receipts are from intermediate input demand (32 percent), household and community demand (38 percent), and export demand (30 percent). The expenditures of the Commodity Account form the Make Matrix of the SAM. The Commodity Account receipts and expenditures is a complete accounting of commodity markets for the village system.

Receipts of the Factor Account show payments by activities for land, labor, and capital. Of the total factor payments of Rs. 21,263,910, 16 percent was for land rent, 42 percent for labor payments, and 42 percent for capital returns. Over 97 percent of factor expenditures went to village households with the remaining going to Rest-of-Nepal.

Households and community received Rs. 23,536,010 as income. Sources of income (receipts) included factor payments (88 percent), inter-institutional transfers (3 percent), Rest-of-Nepal transfers (3 percent), and consumption loans and earned interest (6 percent). Expenditures were for commodities (69 percent), factor (labor) payments (3 percent), inter-institution transfers (3 percent), loan repayments (12 percent), savings (11 percent), and transfers to Rest-of-Nepal (3 percent).

The Financial Account includes data on loan receipts (credit), loan repayments (principal and interest), changes in wealth, and savings/investments. Sources of loan receipts are private wealth (Rs. 1,345,000) and banks and other sources in Rest-of-Nepal (Rs. 1,530,000). Loans are used for purposes of consumption (Rs. 1,131,000) and saving/investment (Rs. 1,744,000). Loan repayments (Rs. 2,810,200) are from households and are distributed as interest and principal payments. Current account transactions for 1988 show a difference of loan receipts over loan principal repayments of Rs. 1,272,000. Thus there is a net reduction in wealth

of Rs. 741,000 and claims by Rest-of-Nepal of Rs 531,000. Saving/investment shows receipts from households (Rs 2,602,530), loan receipts (Rs. 1,744,000), and negative transfers from wealth and Rest-of-Nepal (Rs. 1,272,000). Saving/investment expenditures are for capital formation and transfer to Rest-of-Nepal.

The Rest-of-Nepal Account shows a positive net trade balance of Rs. 2,425,780. Imports included material inputs of Rs. 5,422,540 and commodities for consumption of Rs. 3,561,350 and for capital formation of Rs. 1,268,130. Commodity exports equalled Rs. 12,677,800. The net financial balance for the Kumroj Panchayat is - Rs. 2,425,780 indicating a net outflow of resources to the Rest-of-Nepal. This would indicate that the village system is a net creditor to the Rest-of-Nepal for the base year of 1988 and this amount is equal to about 10.3 percent of institution income.

Factor Income Distribution. Factor income distribution is shown by factor (land, labor, and capital), activity (cropping system, livestock, fishery and forestry, ploughing and transport, trade and services, grass collecting, and other), caste (Brahman, Chhettri, Tharus, Hill Tribes, Lower Castes, and Other Castes), and farm size (large and small). Cropping systems accounted for 65.1 percent of factor income and livestock and associated activities (ploughing and transport and grass collecting) accounted for 23.9 percent. The remaining 11.0 percent is accounted for by fishery and forestry, trade and services, and other. Cropping systems account for over 50 percent of factor income for all castes except Hill Tribes-small farm, Lower Castes-small farms, and Other Castes-small farms. Livestock is particularly important to Brahman-small farms, Lower Castes-large farms, and Other Castes-small farms. Fishery and forestry is important to Hill Tribes-small farms and Lower Castes-small farms. Ploughing and transport is important to Other Castes-large farms, Hill Tribes-small farms,

Other Castes-small farms, Tharu-small farms, Lower Castes-small farms, and Lower Castes-large farms. Trade and services is important to Lower Castes-small farms, Lower Castes-large farms, and Chhettri-large farms. Grass collecting is important to Hill Tribes-small farms, Other Castes-small farms, Chhettri-small farms, and Brahman-small farms.

Diversification is more important for small farms than for large farms. Cropping systems accounted for 73.5 percent of all factor income for large farms versus 62.1 percent for small farms. Ploughing and transport and fishery and forestry were the only activities other than cropping systems that accounted for more than five percent of total factor income on large farms. Activities on small farms other than cropping systems that accounted for more than five percent of total factor income are ploughing and transport, livestock, fishery and forestry, and grass collecting.

Large farms were more capital and land intensive than small farms whereas small farms were more labor intensive than large farms. Overall factor shares on large farms were land (0.47), labor (0.31), and capital (0.22). Overall factor shares on small farms were labor (0.43), land (0.41), and capital (0.16). Capital shares for cropping systems were 0.12 for large farms versus 0.09 for small farms; fishery and forestry was 0.60 for large farms versus 0.36 for small farms; ploughing and transport was 0.45 for large farms versus 0.14 for small farms; and trade and services was 0.63 for large farms versus 0.35 for small farms. Labor shares for fishery and forestry was 0.59 for small farms versus 0.30 for large farms; ploughing and transport was 0.86 for small farms versus 0.55 for large farms; and trade and services was 0.65 for small farms versus 0.37 for large farms.

Household Income Distribution. Institution income distribution is shown by factor income (rural and non-rural activities), non-factor income (financial - -



consumer loans and interest income, transfers - - household, community, and RON), caste (6 categories), and farm size (2 categories).

Household income (annual) for small farm households ranged from Rs. 11,800 to Rs. 25,370 and for large farm households from Rs. 34,310 to Rs. 81,610. Large farm household income was two to four times the level of small farm household income for the same caste. The ordering by caste for large farm household income level from high to low is Other Castes, Chhettri, Hill tribes, Brahman, Tharus, and Lower Castes. The ordering by caste for small farm household income from high to low is Brahman, Chhettri, Other Castes, Tharus, Hill Tribes, and Lower Castes. In general, the lower income groups are Lower Castes, Tharus, and Hill Tribes. The higher income groups are Chhettri, Other Castes, and Brahman.

Sources of income are rural activities (86.5 percent), financial (5.9 percent), transfers (6.4 percent), and non-rural activities (1.2 percent). Non-factor income is particularly important for Hill Tribes-large farms, Lower Castes-large farms, Other Castes-small farms, and Chhettri-large farms. Land rents and capital returns are particularly important to large farm households. Land rents are more than 25 percent of total household income for Other Castes-large farms, Chhettri-large farms, Brahman-large farms, Hill Tribes-large farms, and Tharus-large farms. Capital returns are more than 10 percent of total household income for Other Castes-large farms, Chhettri-large farms, and Brahman-large farms.

Households spent their income on commodities, transfers, loan repayments, and savings. Small farmers consumed higher proportions of their incomes than did large farmers in the same caste. Large farmers used higher proportions of their incomes in repaying loans and in savings than did small farmers. Small farm households spent from 71 to 81 percent of net household

income on consumption versus 53 to 81 percent for large farm households. Loan repayments varied from 5 to 15 percent of net income for small farm households and from 8 to 33 percent for large farm households. Savings ranged from 2 to 23 percent of net household income and, in general, was higher for large farm households than for small farm households.

Impact of Land Resource. An analysis of the impact of the marginal unit of land resource by land using activities was completed. The analysis was in terms of the total impact (direct and indirect) on the Factor and Institution Accounts. The marginal unit of land by cropping system indicates that associated total factor returns range from Rs. 4,612 to Rs. 12,330. Brahman-small farms and Other Castes-large farms had the highest total factor returns per bigha of land. Lower Castes-small farms and Hill Tribes-small farms had the lowest total factor returns per bigha of land. Brahman, Chhetri, and Tharus small farms had higher total factor returns than did the large farms of the same caste whereas Hill Tribes, Lower Castes, and Other Castes large farms had higher total factor returns than did the small farms of the same caste. In general, the same relative results held for institution income. However, when land rent per bigha was used in computing a land rent multiplier, small farms for all castes except Other Castes had higher multipliers for total factor payments and total institution income than did large farms for the same caste. This could indicate either lower quality of land resource (thus a lower rent or opportunity cost for land) for the small farms compared to the large farms or a higher level of productivity per bigha of land of the same quality for the small farms compared to the large farms.

Land rent multipliers for cropping system by caste indicate that per rupee of direct land rent (opportunity cost) increase, incomes of small farmers for the same caste increased by Rs. 1.41 to Rs. 1.96. Land rent multipliers for small

farmers, in general, are larger than land rent multipliers for large farmers. Trickle down effects from large farmers to small farmers per rupee of land rent is two to five times larger than trickle up effects from small farmers to large farmers per rupee of land rent.

The same general results hold for the marginal unit of land used in fishery and forestry activities. However, the multiplier effects per unit of land rent are much higher for fishery and forestry activities than for cropping systems.

Impact of Capital Resources. Capital resources are measured in units of capital returns rather than in value of stock of plant and equipment. This is because no data were available on capital stocks and thus the returns to capital are computed as a residual after all other inputs (material inputs, land, and labor) are attributed their returns.

An analysis of the impact of the marginal Rs. 1,000 capital returns was completed for the various rural activities in the village system. The analysis included an estimation of total factor returns and total income per Rs. 1,000 capital returns. The associated income effects with Rs. 1,000 capital returns for cropping systems ranged from Rs. 11,300 to Rs. 99,383 (excluding the cropping system for Lower Castes-small farm which appears abnormal). Again, small farm cropping systems appear to give higher total factor and total income effects per Rs. 1,000 of capital returns than do large farm cropping systems. Trickle down effects from large farms to small farms again is greater than trickle up effects from small farms to large farms.

The capital returns multiplier's on total incomes for livestock activities range from 3.66 to 26.11; for fishery activities the range is from 2.33 to 33.93; for forestry activities the range is from 2.83 to 9.62; for ploughing and transport activities the range is from 2.68 to 41.05; and for trade and services activities the range is from 2.57 to 9.82. In each case, the general results would indicate that

small farm multipliers are greater than large farm multipliers. It would also indicate that cropping activities have higher capital returns multipliers than do the other activities.

Impact of Commodity Demand. Analysis of the marginal Rs. 1,000 of commodity demand is completed in terms of the total impacts on factor payments, institution income, and income per household by caste and farm size. The commodity demand multiplier on institution income varies from Rs. 1.10 for "other food" and cottage industry to Rs. 1.74 for milk and milk products. The commodity demand multiplier for paddy is 1.58 indicating that for each rupee of paddy demand, village system income will increase by Rs 1.58.

A change in demand for paddy and mustard are relatively of more benefit to large farmers than to small farmers, primarily because of the returns to land relative to labor. However, maize, other food crops, and livestock are relatively more important to small farmers than to large farmers.

Impact of Employment. A change in the demand for labor will benefit incomes of small farmers in all castes relatively more than large farmers because small farmers depend more heavily on the labor resource in generating household income. An increase in the demand for hired labor has the greatest aggregate impact on incomes of Tharu-small, Brahman-small, Hill Tribes-small, and Chhettri-small. However, when shown as a percentage increase per household, the greatest effects are seen in Lower Castes-small, Other Castes-small, Hill Tribes-small, and Tharu-small. Large farms have one-fourth the change in incomes for a change in hired labor demand.

Impact of Financial Account. Loan receipts have an immediate impact on the current account. Each rupee of loan receipts from the private sector is associated with 1.22 rupees of commodity purchases for consumption and

capital formation. The same credit multiplier for loan receipts from the public sector is equal to Rs. 1.00 of commodity purchases.

Each rupee of loan receipts from the private sector is associated directly and indirectly with 1.00 rupee of income across all households. The same credit multiplier for loan receipts from the public sector is equal to Rs. 0.82 of household income. Small farm households showed higher associated income effects from private sector credit than did large farm households in 1988. The opposite was true for public sector credit. Overall, loan receipts for 1988 were associated directly and indirectly with 11.03 percent of total institution income.

Credit for livestock activities from the Small Farmers Development Program from 1983/84 to 1988/89 amounted to Rs. 1,202,000. This credit program is associated with an annual earning capacity of Rs. 2,713,700 or about 12.2 percent of total Kumroj Panchayat income in 1988. The Brahman-small farm households had the highest total income effect of Rs. 918,200 but the Lower Castes-small farm households had the highest percentage of income effect at 17.1 percent. Even though the SFDP livestock credit program was targeted to small farm households, large farm households indirect impacts equalled Rs. 492,300 or about 8.6 percent of their total income.

### Conclusions

The framework of a Social Accounting Matrix has proven to be useful in understanding and analyzing the sources and distribution of income among households of various caste and farm size groupings for a village system in the Tarai region of Nepal. The SAM structures the village system in production activities, commodity markets, factor markets, institutions division (such as households by caste and farm size and community), financial markets, and extra-village system linkages. The SAM structure takes on the form of accounts

with each account showing sources of receipts and expenditures. By assuming linear expenditure linkages among the accounts, the village system shows how incomes are formed by institution divisions. Some conclusions can be drawn from the empirical estimation and analysis of the Kumroj Panchayat village system SAM.

1. Household incomes vary significantly by caste and farm size and depend upon quantity of resource ownership, resource productivities, and mix of activities. The latter becomes important when considering rates of growth in commodity demand. This study, however, did not analyze growth potential in commodity demands.

2. Sources of household income vary significantly by caste and farm size in the Kumroj Panchayat village system. Large farms depend more on land rents and capital returns. Small farms depend more on labor returns and hired labor demand. Large farms have greater amounts of non-factor incomes including loan receipts, interest income, and transfers from the Rest-of-Nepal.

3. Making available additional land and capital resources to small farmers, in general, will have greater impact on total village system factor returns and incomes than will the same resources made available to large farmers.

4. Large farmers participate more in financial markets and thus benefit more on a per household basis than do small farmers. However, credit markets can be targeted to small farmers, such as through the Small Farmers Development Program, and thus are a more direct benefit to them.

5. It appears that trickle down effects from large farmers to small farmers are significant, basically through land leasing and the hired labor market. However, it is not realistic to expect growth in large farmer output to close the income gap between small and large farmers because of the

importance of land and capital resource ownership in determining household incomes.

6. It also appears that there exist trickle up effects from small farmers to large farmers although these effects are lesser in magnitude than the trickle down effects. The trickle up effects are linked through commodity demands. Thus any government program targeted exclusively to low income groups also will have a certain effect on high income or large farm groups.

7. Certain village system activities are identified with specific caste and farm size groupings. For example, cropping system activities are more highly concentrated among large farm households than among small farm households. On the other hand, livestock activities are proportionally more concentrated among small farm households. Fishery and forestry and ploughing and transport are proportionally more concentrated among the caste groupings of Hill Tribes, Lower Castes, and Other Castes. Lower Castes appear to be more oriented to trade and services than are the other caste groupings.

### Policy Implications

The major purpose of this study was to gain a better understanding of income distribution within a village system of Nepal comprised of a mix of households by caste and farm size. However, based on the results of the study, certain policy implications may be drawn.

1. Resources, particularly land and capital, are major constraints to increasing incomes of low income groups. Thus, policies which increase the resource base of low income groups are expected to have significant income impacts on these groups. Policies which would increase cropping intensities

(e. g. number of crops per bigha per year) would benefit those groups with limited land resources. Timely land preparation, supplemental irrigation, and faster maturing crop varieties are means to increase cropping intensities.

2. Low resource productivities appear to be correlated with low levels of education attainment (i. e. Lower Castes, Other Castes, and Tharu have low resource productivities and low education levels). Policies which invest more in education and training are expected to increase resource productivities and thus increase incomes of limited resource groups.

3. Credit programs in livestock, through the SFDP, have benefitted small farm groups. Small farm households appear to be using the informal credit market (private loan disbursements) with its higher interest rates proportionally more than do large farm households. It would appear that a significant expansion of the credit component of the SFDP could increase incomes of low resource groups significantly.

4. Low income groups are more active in the hired labor market than are high income groups. Thus policies which would expand the demand for labor such as cottage industry, village infrastructure projects, agro-processing industries, and community forestry projects would benefit low resource and low income groups.

#### Limitations and Further Research

The results and conclusions of this study are limited by the accuracy of the data and the assumptions used. Primary survey data were used to estimate enterprise budgets and household consumption. Sample size was small for some castes and some farm size groupings. However, with perhaps one or two



exceptions, the data appeared to the author to be representative of the groups described.

Rarely do households maintain consistent records of their incomes and expenditures. Thus, recall bias may influence the data to some extent. However, consumption data were compared to other sources estimated for Nepal and appear to be consistent.

Data on credit were estimated from the household survey and, where applicable, verified with information from the financial institutions. However, credit from the informal market may be under- or over- reported. Further work in this area is needed to supplement the data available from the banking institutions.

This study is one of the first to estimate financial flows for a rural area in Nepal. As such, it is on uncharted ground to know whether the estimated net financial balance for the Kumroj Panchayat seems reasonable. However, a mature rural region, heavily dependent upon agricultural exports with little new investments in agro-processing or small manufacturing (including cottage industry), would appear to have a positive net trade balance and thus a negative net financial balance.

Definition of small farmers as adopted by the ADB/N does not allow for the separation of completely landless households apart from those with some land. Increasingly, rural areas will have households that are not associated with agriculture and the land resource base. There is a need to separate households that are landless and poor from those that are landless but are engaged in other activities such as cottage industry or other small industry and have significant amounts of non-farm income.

Finally, this study carried on a regional analysis assuming fixed price multipliers. The methodology does not determine which resource is in scarce

supply and should be expanded. There is a need to expand the SAM methodology for rural regional analysis allowing for commodity and factor markets to operate in much the same way as in agricultural sector analysis. The framework should be one of regional equilibrium in commodity, factor, and financial markets.

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## APPENDICES

## APPENDIX A

### DATA ON MACROECONOMIC ISSUES

TABLE A-1  
GROSS DOMESTIC PRODUCT, NEPAL,  
1978/79 to 1988/89

Rs. in Million											
Item	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88**	1988/89*
<b>Nominal GDP</b>	22215	23351	27307	30988	33761	39390	44417	50428	57828	67835	74575
Agricultural	13522	13683	15679	17903	19282	22771	24171	26819	30582	35648	41608
Non-Agricultural	8693	9668	11628	13085	14479	16619	20246	23609	27246	32187	32967
<b>Real GDP (1974/75 Price)</b>	19048	18606	20158	20920	20297	22262	23630	24645	25299	27765	28189
Agriculture	11480	10933	12066	12616	12478	13668	13990	14705	14789	16068	17161
Non-Agriculture	7568	7673	8092	8304	7819	8594	9640	9940	10510	11697	11028
<b>GDP Deflator</b>	116.63	125.50	135.46	148.13	166.33	176.94	187.97	204.62	228.58	244.32	264.55
Agriculture	117.79	125.15	129.94	141.91	154.53	166.60	172.77	182.38	206.79	221.86	242.46
Non-Agriculture	114.87	126.00	143.70	157.57	185.18	193.38	210.02	237.52	259.24	275.17	298.94
PERCENTAGE CHANGE OVER PREVIOUS YEAR											
<b>Nominal GDP</b>	12.58	5.11	16.94	13.48	8.95	16.67	12.76	13.53	14.67	17.30	9.94
Agriculture	15.06	1.19	14.59	14.18	7.70	18.09	6.15	10.96	14.03	16.57	16.72
Non-Agriculture	8.93	11.22	20.27	12.53	10.65	14.78	21.82	16.61	15.41	18.13	2.42
<b>Real GDP (1974/75 Price)</b>	2.37	-2.37	8.34	3.78	-2.98	9.68	6.15	4.30	2.65	9.75	1.53
Agriculture	3.04	-4.76	10.36	4.56	-1.09	9.54	2.36	5.11	.57	8.65	6.80
Non-Agriculture	1.37	1.39	5.46	2.62	-5.84	9.91	12.17	3.11	5.73	11.29	-5.72
<b>GDP Deflator</b>	9.98	7.61	7.94	9.35	12.29	6.37	6.23	8.86	11.71	6.89	8.28
Agriculture	11.66	6.25	3.83	9.21	8.89	7.81	3.71	5.56	13.38	7.29	9.29
Non-Agriculture	7.46	9.69	14.05	9.66	17.52	4.43	8.61	13.09	9.15	6.15	8.64

\*\* Revised Preliminary Estimates.      \* Preliminary Estimate

Source: HMG, Ministry of Finance, Economic Survey, 1989.

TABLE A-2  
FARM SIZE AND DISTRIBUTION OF CULTIVATED  
LANDHOLDINGS, NEPAL, 1981

Region/Size of Holdings	Number of Households	Percentage of Total Households	Total Cultivated Hectares	Percentage of Total Cultivated Land	Average Cultivated Hectares per Holding
Nepal					
Less than 0.5 hectare	1,107,902	50.5	161,987	6.6	0.15
0.5 - 1.0 hectare	355,420	16.2	264,522	10.8	0.74
1.0 - 3.0 hectares	535,964	24.4	868,201	35.3	1.62
More than 3.0 hectares	<u>194,623</u>	<u>8.9</u>	<u>1,160,628</u>	<u>47.3</u>	<u>5.96</u>
Total	2,193,909	100.0	2,455,338	100.0	1.12
Tarai					
Less than 0.5 hectare	434,210	45.6	38,705	2.8	0.09
0.5 - 1.0 hectare	123,250	13.0	91,367	6.5	0.74
1.0 - 3.0 hectares	262,336	27.6	463,521	33.1	1.77
More than 3.0 hectares	<u>131,312</u>	<u>13.8</u>	<u>807,833</u>	<u>57.6</u>	<u>6.15</u>
Total	951,108	100.0	1,401,426	100.0	1.47
Hills and mountains					
Less than 0.5 hectare	673,692	54.2	123,282	11.7	0.18
0.5 - 1.0 hectare	232,170	18.7	173,155	16.4	0.75
1.0 - 3.0 hectares	273,628	22.0	404,680	38.4	1.48
More than 3.0 hectares	<u>63,311</u>	<u>5.1</u>	<u>352,795</u>	<u>33.5</u>	<u>5.57</u>
Total	<u>1,242,801</u>	<u>100.0</u>	<u>1,053,912</u>	<u>100.0</u>	<u>0.85</u>

Source: Central Bureau of Statistics, Sample Census of Agriculture (Kathmandu: CBS, 1981).

TABLE A-3  
LAND HOLDING IN RELATION TO SIZE OF  
HOUSEHOLD, NEPAL (Ha.)

Size	Tarai	Hills and Mountains
Large	Above 5.44	Above 1.04
Medium	2.73 to 5.4	0.52 to 1.04
Small	1.03 to 2.73	0.21 to 0.52
Marginal	Up to 1.03	Up to 0.21

Source: Nepal Rastra Bank (1989). Multipurpose Household Budget Survey, Kathmandu.

TABLE A-4  
POPULATION, CULTIVATED AREA, AND  
FOREST AREA, NEPAL

Year	Population (mill)	Cultivated Area 000ha.	Forest Area 000ha
1964	10.01	1700	6402
1970	11.32	1845	n. a
1975	12.83	2326	4823
1980	14.63	2527	4099
1985	16.68	2930	3800

Source: Wallace, M. B. (1987). Community Forestry in Nepal Too Little, Too Late ?, Kathmandu: Winrock Project.

Central Bureau of Statistical (1989) Statistical Year Book of Nepal, Kathmandu, Nepal.

TABLE A-5  
FOOD BALANCE OF NEPAL

Year	(000 Metric Ton)
1977/78	311.4
1978/79	311.7
1979/80	(34.0)
1980/81	348.8
1981/82	261.0
1982/83	(110.9)
1983/84	243.1
1984/85	95.0
1985/86	173.4
186/87	(63.6)

Note: Negative figures in parentheses.

Source of Estimation:

1. Central Bureau of Statistics. (1989). Statistical Year Book of Nepal, Kathmandu, Nepal.
2. Conversion method adopted by Department of Food and Agricultural Marketing Services.

TABLE A-6  
ANNUAL ADDITIONS TO IRRIGATION FACILITIES,  
NEPAL, 1974/75 TO 1988/89

In Hectare															
Description	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89*
<u>Topography</u>	6720	3621	20093	7840	22597	41274	9375	11388	14025	17715	0	40477	27231	36572	21336
a. Hill	120	1541	1833	500	305	3314	100	88	525	590	5522	2335	540	2085	—
b. Tarai	6600	2080	18260	7340	22292	37960	9275	11300	13500	17125	34955	7800	15140	5135	6600
c. Not Classified												17096	20892	27382	14736
<u>Types</u>	6720	3621	20093	7840	22597	41274	9375	11388	14025	17715	40477	27231	36572	34602	21336
a. Canals	6720	3121	19693	7840	21927	36574	8300	10088	11025	12000	35422	7635	11940	7385	4000
b. Ground Water	—	500	400	—	670	4700	1075	1300	3000	5715	5055	2500	3740	2285	2500
c. Not Classified												17096	20892	24932	14736

\* First Nine Months

Source Ministry of Finance, Economic Survey, 1989

TABLE A-7

USE OF CHEMICAL FERTILIZER, IMPROVED SEED,  
AND INSECTICIDES, NEPAL, 1974/75 TO 1988/89

IN METRIC TON															
		First Nine Months													
Food Crops	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89
1 Chemical Fertilizer (Nutrients)	12658	12266	14884	17467	18543	20964	22458	23817	31279	37299	42829	43408	45054	54412	37627
a. Nitrogen	8923	8423	10694	13012	13746	15500	16767	17976	22882	28058	31656	31698	32910	38233	26965
b. Phosphorus	3849	2491	2778	3383	3341	4286	5105	5068	7459	8462	10623	11053	11936	15309	9751
c. Potash	886	1352	1412	1072	1456	1178	586	773	938	779	551	657	208	870	911
2. Improved Seed	1934	2064	2275	2532	2421	2919	1824	2566	5641	3000	2116	2485	2411	2551	1930
a Paddy	328	184	359	299	255	305	204	244	691	318	237	154	141	212	127
b Maize	51	154	106	145	93	143	104	135	283	167	93	69	72	96	89
c Wheat	1555	1726	1810	2088	2073	2471	1516	2187	4667	2515	1786	2242	2198	2243	1714
3 Insecticides															
a Powder*	N A	N A	N A	N A	N A	N A	N A	321	430	459	521	603	478	720	581
b Liquid (In litres)	N A	N A	N A	N A	N A	N A	N A	5245	10699	5315	6551	4859	4572	8016	3858

\* Includes Agri-lime

Source Ministry of Finance, Economic Survey, 1989



TABLE A-8

AREA COVERED BY IMPROVED SEEDS, SPECIAL  
POCKET, AND ORDINARY PROGRAMME,  
NEPAL, 1981/82 to 1988/89

In Thousand Hectare

	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89*
1 Area Covered by Improved Seeds	1161.5	1020.6	967.0	998.5	1087.6	1117.0	1256.5	1526.6
2. Area Covered by Special								
<u>Pocket and Ordinary Program</u>	1029.0	1079.0	1177.2	1050.0	1134.8	1347.5	1464.8	1820.3
A Paddy	437.0	480.0	479.2	526.7	554.7	580.6	693.3	921.2
b Maize	133.0	147.0	214.8	169.6	335.1	355.3	247.5	371.4
c. Wheat	400.0	406.0	416.2	278.0	164.8	290.6	421.7	432.2
d Potato	40.0	46.0	46.0	58.7	59.0	94.5	66.2	67.3
e. Sugarcane	19.0	20.0	21.0	17.0	21.2	26.5	27.1	28.2

\* Estimate

Source: Ministry of Finance, Economic Survey, 1989

TABLE A-9

AREA, PRODUCTION, AND YIELD OF PRINCIPAL FOOD  
CROPS, NEPAL, 1978/79 TO 1988/89

										Area Production Yield	Thousand Hectare Thousand M T MT/Hectare
Food Crops	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89*
Paddy											
Area	1263	1254	1276	1297	1265	1334	1377	1391	1333	1423	1450
Production	2339	2060	2464	2560	1833	2757	2709	2804	2372	2982	3283
Yield	1.85	1.64	1.93	1.97	1.45	2.07	1.97	2.02	1.78	2.09	2.26
Maize											
Area	454	432	457	475	511	504	579	615	627	674	722
Production	743	576	743	752	718	761	820	874	868	902	1072
Yield	1.64	1.33	1.63	1.58	1.41	1.51	1.42	1.42	1.38	1.34	1.49
Wheat											
Area	356	367	392	400	484	472	452	483	536	597	599
Production	415	440	477	526	657	634	534	598	701	745	830
Yield	1.17	1.20	1.22	1.32	1.36	1.34	1.18	1.24	1.31	1.25	1.39
Barley											
Area	26	26	27	27	24	25	28	29	29	29	29
Production	23	23	23	23	21	22	24	23	25	24	27
Yield	.88	.88	.85	.85	.88	.88	.86	.79	.86	.86	.92
Millet											
Area	123	123	122	122	129	124	134	151	151	165	183
Production	133	119	122	122	121	115	124	138	138	150	183
Yield	1.08	.97	1.00	1.00	.94	.93	.93	.91	.91	.91	1.00
Index of Food Crops (1974/75 = 100)											
Area	103.73	102.80	106.16	108.38	112.65	114.80	119.98	124.60	124.93	134.83	139.26
Production	96.61	85.18	101.35	105.43	88.67	113.53	111.46	117.44	108.63	127.16	142.80
Yield	93.21	82.86	95.47	97.30	78.71	98.89	92.90	94.25	97.73	94.32	102.84

\* Provisional

Source HMG, Ministry of Finance, Economic Survey, 1989

TABLE A-10  
FOREST AREA BALANCE, NEPAL

Item	Unit	1964	1985
Forest Area	(mill. ha)	6.6	3.2
Human Population	(mill.)	10	16.7
Fuelwood Supply	mill. cu. m.	13.2	6.4
Fuelwood Demand	mill. cu. m.	11.6	16.7
Fuelwood Balance	mill. cu. m.	+1.6	-10.3
Farmland	mill. ha.	1.6	3.2
Required Forest Area	mill. ha.	4.5	8.1
Forest Area Balance	mill. ha.	+2.1	-4.9

### GROWTH RATES

Detail	Rate	Period
Population	+2.6	1971-1981
Food Production	+1.4	1971-1981
Cultivated Area	+3.5	1964-1985
Forest Area	-1.9	1964-1985
Bovine Population	+1.0	1962-1981

Source: Central Bureau of Statistics. (1989). Statistical Year Book of Nepal.

Wallace, M. B. (1987). Community Forestry in Nepal: Too Little, Too Late?, Kathmandu: Winrock International.

Wallace, M. B. (1988). Forest Degradation in Nepal: Institutional Context and Policy Alternatives, Kathmandu: Winrock International.

Assumption:

- each person required 1 cu. m. fuelwood annually
- 2 cu. m. growth occurs annually on one ha. of forest.
- 2.8 ha unmanaged forest needed for one ha. farmland to provide sufficient fodder for mixed farming.

TABLE A-11  
ENERGY CONSUMPTION IN NEPAL FROM 1970/71 TO 1985/86  
(1,000 TON OIL EQUIVALENT)

Type	1970/71	1975/76	1980/81	1985/86
<u>Traditional</u>				
Firewood	2055	2334	2606	2685
Agricultural Waste	42	48	54	55
Animal Waste	<u>16</u>	<u>18</u>	<u>20</u>	<u>21</u>
Total	2113	2400	2680	2761
<u>Commercial</u>				
Coal	37	29	39	45
Petroleum Fuel	62	83	120	153
Hydro Energy	<u>5</u>	<u>13</u>	<u>25</u>	<u>55</u>
Total	104	135	184	253

Source: Wallace, M. B., Community Forestry in Nepal: Too Little, Too Late? Winrock Project, Kathmandu, Nepal, June, 1987.

TABLE A-12  
DEVELOPMENT EXPENDITURES BY SECTORS, NEPAL

Development Expenditures. Reflecting the growth orientation of the program, development expenditures expanded by 17 percent annually under the SAP (Table I.B.2). While data on private investment are not very reliable, private investment's share of GDP was estimated to have remained virtually constant at 10.4 percent. As compared to the end of the Sixth Plan period, the most significant increases in Government development expenditures occurred in the social sectors, communications and electricity while the share of agriculture (including irrigation and forestry) fell substantially. For the 1988/89 budget, in an attempt to compensate for agriculture and transport's declining share of the development budget and reflecting agriculture's prominence in the BNP (see below), the Government increased their allocations dramatically while proposing expenditures that were 50 percent higher than the 1987/88 level. Based on experience, it is unlikely that these levels will be realized; however, even if the historical utilization of 85 percent of allocations is realized, it remains to be seen whether the funds could be utilized effectively.

### DEVELOPMENT EXPENDITURES BY SECTOR

	Average -----		Actual-----						Budget
	1975/76 - 1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	
	1980/81								
Education	11.5	11.1	12.1	13.1	11.7	14.2	14.0	13.1	10.9
Health	5.1	4.1	4.3	3.9	4.6	4.1	4.2	5.6	6.1
Drinking Water	2.9	2.9	4.9	4.3	3.7	3.7	3.7	3.6	3.9
Agriculture	10.9	12.6	13.4	10.6	12.8	13.8	9.2	8.4	10.1
Irrigation	9.4	9.6	9.8	10.6	11.9	13.6	11.5	8.1	13.0
Forestry	3.5	5.0	4.6	4.5	5.3	5.9	5.3	4.6	4.8
Industry & Mining	6.4	7.1	7.5	12.6	6.3	6.4	5.1	6.6	7.2
Communications	0.9	1.3	1.5	1.9	1.6	1.4	1.9	5.8	2.5
Transportation	26.1	20.0	16.1	14.5	16.8	11.5	13.4	13.2	17.9
Electricity	13.2	10.3	3.9	12.6	9.2	16.7	16.8	17.4	10.4
Other	10.1	16.1	16.9	11.4	16.0	8.7	14.9	13.7	13.2
Total Devt. Expenditure	1652	3727	4982	5164	5489	6213	7378	8889	13368
Nominal Growth (%)	18.9	36.5	33.7	3.6	6.3	13.2	18.7	20.5	50.4

Source: World Bank, Nepal: Policies for Improving Growth and Alleviating Poverty, 1989.

TABLE A-13  
LIVESTOCK POPULATION, NEPAL (1962 - 1985)

million head						
Period	Cattle	Buffalo	Goats & Sheep	Pigs	Horses & Mules	Others
1962/63	5.7	2.0	2.8	na	na	na
1981/82	6.5	2.4	4.3	0.4	0.03	0.04
1984/85	6.4	2.8	4.9	na	na	na

Source: 1. CBS, Statistical Year Book of Nepal, CBS, Kathmandu, 1989.

2. Wallace, M.B. "Forest Degradation in Nepal: Institutional Context and Policy Alternatives!" Winrock Project, Kathmandu, March 1988.

**TABLE A-14**  
**PHILOSOPHY AND WORKING CONCEPT OF SMALL**  
**FARMERS DEVELOPMENT PROGRAM**

### Philosophy of SFDP

#### Objectives

The general objective of the programme is to improve the socio-economic condition of the small farmer. However, the specific objectives are:

- (i) to improve the living standard of the small farmers by utilizing their skill, labour and mobilizing locally available resources.
- (ii) to make the small farmers self-reliant, through constructive group action, in planning and implementation of the development programme.
- (iii) to build up receiving and utilizing mechanism among small farmers to make them capable to receiving the services of delivery mechanism.
- (iv) to promote the locally available technology for the best use of the same in favour of the small farmer's development.
- (v) to gear up the delivery mechanism to suit the need of the small farmers.

#### How these Objectives are achieved

These objectives are achieved through execution of the SFD Programme under following philosophy and concept:

- (i) Organising small farmers at village level in groups of 5-25 members.
- (ii) Assisting them in implementing various income raising agricultural and agro-based enterprises and other social programmes to make them self-reliant.
- (iii) Training SFDP staff and small farmers for skill formation.
- (iv) Promoting low cost and intermediate technology.
- (v) Enabling small farmers to develop capability to acquire the services of various line agencies through group personality built-up. This is done by matching the programme of delivery and receiving agencies and through strengthening the receiving mechanism of small farmers.
- (vi) Integrating different social programmes like population education, health and sanitation, nutrition, adult education etc. with SFDP with the help of concerned line agencies.
- (vii) Enabling small farmers to formulate their group plans in the short run for the development of the concept 'planning from below' in the long run.
- (viii) Conducting action based research to assess the expansion of the programme to other areas.
- (ix) Following an evaluation process for keeping an watchful eye on the activities.

Source: ADB/N (1985). A Decade of Small Farmers Development Programme in Nepal, Kathmandu: Agricultural Development Bank.

TABLE A-15  
SMALL FARMERS DEVELOPMENT PROGRAM,  
NEPAL, 1975/76 TO 1988/89

Year	No. of SFDP's	Cumulative Group Formation			Cumulative Group Members (00)			Loan Operation (Rs. 000)			Group Saving (Rs. 000)
		M	F	Total	M	F	Total	Disburs- ment	Collec- tion	Out- standing	
1975/76	2	28	0	28	4.4	0.04	4.4	453	9	444	1.9
1976/77	15	128	0	128	14.2	0.2	14.4	1120	124	1440	10.9
1977/78	17	294	2	296	31.4	0.6	32.0	2515	624	3331	55.6
1978/79	24	454	7	461	49.8	1.4	51.2	3357	1189	5499	96.3
1979/80	29	617	17	634	63.8	2.5	66.3	3865	1566	7798	160.1
1980/81	30	744	42	786	75.6	4.1	79.7	4953	2548	10203	279.7
1981/82	54	1161	115	1276	116.0	12.4	128.4	12467	3460	18601	397.0
1982/83	84	1900	339	2239	188.0	25.2	213.2	25580	6879	37302	759.1
1983/84	121	2750	446	3196	259.7	35.8	295.5	42469	14914	64857	1396.1
1984/85	162	3961	593	4554	365.4	50.7	416.1	70363	25284	109936	2464.4
1985/86	250	5295	705	6000	471.9	69.6	541.5	96349	40376	165909	3764.7
1986/87	298	6474	844	7318	560.7	83.4	644.1	99203	51292	222509	5857.8
1987/88	346	8000	1188	9188	675.7	109.4	785.1	149866	75268	299884	8538.0
1988/89	416	9964	1732	11696	822.2	145.9	958.1	207072	108822	400134	11995.5

Source: Agricultural Development Bank, Nepal

M - Males  
F - Females



TABLE A-16  
SOCIAL AND COMMUNITY ACTIVITIES  
UNDER SFDP, NEPAL (1975-84)

Activity	Unit	Achievement
Sanitation	Number of persons involved	15229
Family Planning	Number of persons sterilized	1238
Adult Education	Number of persons literated	4410
Food and Nutrition	Number of children served	1217
Drinking Water	Number of wells/tubewells	511
Road Construction and Maintenance	Km.	273
Meeting Hall Construction	Number of halls	51
Bridge construction and maintenance	Number of bridges	20
Veterinary Service	Number of head served	3599
Compost pit construction	Number of pits	1535
Forest plant distribution	Number of plants	25669
Community Forestry	Area in ha.	62
School House Construction	Number of houses	27
Community Irrigation Project	Number of projects	9
	Area covered (ha.)	693

Source: ADB/N, 'A Decade of Small Farmers Development Programme' ADB/N, Kathmandu, 1985.

TABLE A-17  
INVESTMENT IN AGRICULTURAL SECTOR BY  
MAJOR FINANCIAL INSTITUTIONS,  
NEPAL, 1976/77 to 1988/89

(Rs. million)			
Year	ADB/N	Commercial Banks	Cooperatives
1976/77	222.1	20.5	48.2
1977/78	382.5	55.1	71.7
1978/79	218.0	32.1	65.3
1979/80	147.9	25.4	44.9
1980/81	134.2	31.5	30.7
1981/82	256.4	57.6	36.9
1982/83	345.8	74.5	63.7
1983/84	476.2	119.8	72.9
1984/85	583.8	145.6	103.9
1985/86	660.4	148.9	101.8
1986/87	610.9	152.9	na
1987/88	854.0	553.2	na
1988/89	1046.8	959.6*	na

- Sources: 1. Nepal Rastra Bank, Agricultural Statistics of Nepal, Kathmandu, 1987.
2. Ministry of Finance, Economic Survey, Kathmandu, 1989.
3. Agricultural Development Bank, Kathmandu.
4. Central Bureau of Statistics, A Statistical Year Book of Nepal, Kathmandu, 1989.

\* provisional

TABLE A-18  
STRUCTURE OF INTEREST RATES, NEPAL  
(PERCENTAGES)

	July		June		June	
	1979	1980	1981	1982	1985	1987
Commercial Banks						
Deposits:						
Savings	8.0	8.0	8.0	8.5	8.5-10.0	8.5-10.0
Time Deposits (3 months)	4.0	4.0	4.0	4.5	4.5-5.5	8.5
Time Deposits (6 months)	9.0	9.0	9.0	9.5	9.5-10.5	8.8
Time Deposits (1 year)	12.0	12.0	12.0	12.5	12.5-13.3	12.5
Time Deposits (2 years)	13.0	13.0	13.0	13.5	13.5-14.5	13.5
Loans:						
Industry (priority purposes)	10.0-14.0	10.0-14.0	10.0-16.0	11.0-17.0	9.0-17.0 a/	15.0*
Agriculture (priority purposes)	8.0-14.0	8.0-14.0	8.0-14.0	10.0-15.0	8.0-15.0 a/	15.0*
Commercial Loans and Overdrafts	16.0	16.0	16.0	17.0	17.0-19.0 b/	17.0-21.0
Agricultural Development Bank						
Cooperative and Sajhas	4.0-10.0	4.0-10.0	4.0-10.0	6.0-11.0	4.0-11.0	13.0-18.0
Others	6.0-14.0	6.0-14.0	6.0-14.0	10.0-15.0	8.0-15.0	15.0-20.0
Nepal Industrial Development Corporation						
According to type of Industry	11.0-16.0	11.0-16.0	11.0-16.0	11.0-17.0	12.0-17.0	14.5-18.0
Government						
Treasury Bills	5.0	5.0	5.0	5.0	5.0	5.0
Development Bonds	10.0	10.0	10.0	10.5	10.5	10.5
National Savings Certificate c/	-	-	-	-	13.0	13.0

a/ Banks are required to charge 2 percent less interest on loans to cottage industry and agricultural sector.

b/ Effective from June 11, 1985, interest on 29 items of luxury goods has been fixed at minus 19 percent.

c/ National Savings Certificates were first issued in March 1984.

\* Maximum.

Source: World Bank, Nepal: Policies for Improving Growth and Alleviating Poverty, 1989.

TABLE A-19  
PRICE INDEXES BY LOCATION, NEPAL,  
1973/74 TO 1987/88

Year	National	Kathmandu	Hill Urban	Tarai Urban
1973/74	118.2	114.6	114.6	122.5
1974/75	138.0	134.0	130.6	143.5
1975/76	137.0	141.1	134.4	135.2
1976/77	140.7	141.5	139.4	140.7
1977/78	156.4	155.9	154.3	156.5
1978/79	161.8	161.1	159.7	162.2
1979/80	177.6	180.8	175.3	175.3
1980/81	201.4	207.2	197.9	198.0
1981/82	222.4	229.2	218.0	219.5
1982/83	254.0	257.5	250.2	252.6
1983/84	269.8	271.4	266.5	268.6
1884/85	280.9	281.6	291.1	277.0
1985/86	325.5	329.7	325.4	320.8
1986/87	368.7	376.0	369.6	360.6
1987/88	409.3	411.7	413.1	404.7

Source: Central Bureau of Statistics (1989). Kathmandu.

## **APPENDIX B**

### **ENTERPRISE BUDGETS OF VARIOUS ECONOMIC ACTIVITIES IN THE STUDY AREA**

TABLE B-1  
AN OUTLOOK OF THE STUDY AREA - BEFORE AND AFTER

Description	Unit	Before (1983)	After (1988)
Area under improved farming	Bigha	100	850
Area under traditional farming	Bigha	1598	848
<u>Productivity</u>			
Paddy	Quintal/Bigha	12	28
Wheat	Quintal/Bigha	6	14
Maize	Quintal/Bigha	6	16
Mustard	Quintal/Bigha	1.2	2.4
<u>Import</u>			
Agricultural inputs			
• Seed	Quintal	15	100
• Fertilizers	Quintal	50	750
Agricultural output			
• Paddy	Quintal	120	—
• Maize	Quintal	—	—
• Mustard	Quintal	—	—
• Other	Rs	19000	—
<u>Export</u>			
• Seed (maize & wheat)	Quintal	—	120
• Paddy	Quintal	120	3000
• Maize	Quintal	—	200
• Mustard	Quintal	400	1000
• Others	Rs	—	105,00
• Milk & Milk Products	Rs	—	120,000
<u>Borrowings</u>			
# of borrowers (institutional source)	Number	122	515
# of borrowers (Pvt source)	Number	350	179
Families with surplus	Number	94	538
Families at breakeven	Number	196	125
Families which could manage for 6-9 months	Number	414	83
Families which could manage for less than 6 months	Number	109	92

Source: Bhattarai, R. P. (1989). SFDP Kumroj: A Case Study of Budhi Rapti Irrigation Project, and unpublished paper.

TABLE B-2

ENTERPRISE BUDGETS FOR PADDY BY  
CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

			(Rs./BIGHA)											
ITEM	UNIT	PRICE	CASTE AND FARM SIZE											
			B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
A. <u>PURCHASED INPUTS</u>														
Seed	Kg.	4.25	179	164	172	163	165	178	177	155	200	172	186	186
Manure	Quintal	5.5	120	264	151	180	32	56	83	204	147	115	76	312
Fertilizer*	Kg.	4	417	366	285	281	214	204	267	128	134	247	100	197
Chemicals*	Rs.		118	103	49	61	23	36	0	0	27	57	16	82
B. <u>FACTOR INPUTS</u>														
Land	Bigha		1	1	1	1	1	1	1	1	1	1	1	1
Labor	M-days	22.5	1566	1615.6	1221	2032	2173	1273	1371	1072	1334	1609	1481	1339
PTS**	BPM-Days	56	1220	1243	1154	1139	892	1110	1513	1040	1288	724	981	799
C. <u>OUTPUT</u>														
Paddy	Quintal	425	9700	10367	9066	9184	7397	7224	8938	6944	8667	6379	7739	8232
Straw	Quintal	40	1204	1258	1063	1159	909	932	1150	774	667	919	936	944
D. Sample Size	number		11	41	5	16	7	32	2	8	1	3	3	3
E. Av. Area Per Farm	Bigha		3.25	1.42	8.7	1.18	3.82	1.95	1.5	0.66	1.5	0.7	14.43	1.02
F. Total Area Under Paddy	Bigha		190	280.5	69.6	122.5	96.8	236	11.3	51.7	1.5	8.7	37.6	21.5

\* Imported material inputs

\*\* Bullock pair mandays equivalent

TABLE B-3  
ENTERPRISE BUDGETS FOR MAIZE BY  
CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

			(Rs./BIGHA)											
ITEM	UNIT	PRICE	CASTE AND FARM SIZE											
			B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
A. PURCHASED INPUTS														
Seed	Kg.	3.3	50	43	50	51	49	48	45	42	80	51	67	50
Manure	Quintal	5.5	168	218	246	98	29	49	60	114	99	35	143	244
Fertilizer*	Kg.	4	174	219	163	134	149	112	200	79	16	68	239	126
Chemicals*	Rs.		45	35	24	40	0	12	35	0	0	6	44	0
B. FACTOR INPUTS														
Land	Bigha		1	1	1	1	1	1	1	1	1	1	1	1
Labor	M-days	23.5	888	956	681.8	967	987	857	1015	773	720	893	913	1078
PTS**	BPM-Days	56	1599	987	974	896	958	874	985	742	904	715	926	732
C. OUTPUT														
Maize	Quintal	330	3364	4130	2980	2743	2765	2520	3134	2057	2000	1975	3111	2700
Straw & Cobs	Quintal	10	150	184	121	131	123	105	149	95	80	101	111	120
D. Sample Size (n)	number		11	41	3	14	7	32	2	12	1	7	2	3
E. Av. Area Per Farm	Bigha		2.4	1.06	4.08	1.1	1.36	1.02	1.5	0.82	2.5	0.93	3.43	0.95
F. Total Area Under Maize	Bigha		140	208	19.8	98.8	40.5	124.2	6.7	94.3	2.5	39.5	9	20

\* Imported material inputs

\*\* Bullock pair mandays equivalent



TABLE B-4  
ENTERPRISE BUDGETS FOR MUSTARD  
BY CASTE AND FARM SIZE KUMROJ  
PANCHAYAT, 1988

(Rs./BIGHA)														
ITEM	UNIT	PRICE	CASTE AND FARM SIZE											
			B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
A. PURCHASED INPUTS														
Seed	Kg.	11.3	138	184	158	139	134	148	140	141	160	152	133	125
Manure	Quintal	5.5	111	145	96	72	30	39	66	66	100	38	34	227
Fertilizer*	Kg.	4	389	342	408	247	190	180	267	92	120	98	236	337
Chemicals*	Rs.		0	8	15	5	7	3	0	0	0	8	0	0
B. FACTOR INPUTS														
Land	Bigha		1	1	1	1	1	1	1	1	1	1	1	1
Labor	M-days	23.5	708	688	540	570	691	594	457	534	340	642	470	871
PTS**	BPM-Days	56	1003	1052	908	911	671	872	1541	820	712	735	796	1100
C. OUTPUT														
Paddy	Quintal	1130	3385	3615	3158	3052	2925	2899	3161	2502	2400	2354	2925	3250
Straw	Quintal	5	18	17	17	17	17	13	11	11	10	13	26	20
D. Sample Size (n)	number		11	41	5	17	7	32	2	12	1	7	2	3
E. Av. Area Per Farm	Bigha		2.85	1.21	7.15	1.05	1.94	1.28	1.5	0.8	2.5	0.93	14.43	0.95
F. Total Area Under Mustard	Bigha		166	234	57	115	58.1	155.2	9.3	92.3	2.5	39.5	37.6	20

\* Imported Material Inputs

\*\* Bullock pair mandays equivalent

TABLE-B-5  
ENTERPRISE BUDGETS FOR OTHER CROPS  
BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

(Rs./BIGHA)														
ITEM	UNIT	PRICE	CASTE AND FARM SIZE											
			B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
A. PURCHASED INPUT														
Seed	Rs.		305	861	694	710	682	305	2000	298	2000	1250	256	1096
Manure	Quintal	5.5	185	328	115	132	87	72	220	81	220	400	43	157
Fertilizer*	Kg.	4	427	548	252	109	119	201	400	44	400	145	137	200
Chemicals*	Rs.		58	0	0	36	0	110	0	0	0	0	0	0
B. FACTOR INPUTS														
Land	Bigha		1	1	1	1	1	1	1	1	1	1	1	1
Labor	M-days	23.5	1164	1173	1318	1932	962	1765	3760	1208	3760	6087	821	5203
PTS**	BPM-Days	56	1429	1743	1040	850	937	929	2240	648	2240	1780	923	1200
C. OUTPUT														
Main By-Products	Rs. Rs.		6944	13278	6667 0	26820 0	6023 0	5638 0	18000 0	3242 0	18000 0	17500 0	2308 0	31818 0
Sample Size	number		11	41	4	9	7	24	1	5	1	3	3	3
Av. Area Per Farm	Bigha		0.3	0.33	0.58	0.14	0.31	0.39	0.1	0.22	0.05	0.04	1.03	0.05
Total Area Under Others	Bigha		36	63.8	3.6	5.63	8.8	52.5	0.3	9.1	0.05	0.4	3.9	1.1

\* Imported material inputs

\*\* Bullock pair mandays equivalent

TABLE B-6  
ENTERPRISE BUDGETS FOR LIVESTOCK ACTIVITY  
BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

		(Rs./LSU)												
	Unit	Price	Ltk-BL	Ltk-BS	Ltk-CL	Ltk-CS	Ltk-TL	Ltk-TS	Ltk-HTL	Ltk-HTS	Ltk-LL	Ltk-LS	Ltk-OL	Ltk-OS
<b>A. PURCHASED INPUTS</b>														
Straw	Qtl.	40	498.1	400.0	406.3	431.8	304.3	270.6	375.0	496.9	333.3	300.0	423.1	403.2
Rice bran	Qtl.	150	172.4	200.0	156.3	227.3	173.9	117.6	375.0	68.3	33.3	50.0	269.2	241.9
Mz Flour	Qtl.	382.5	61.3	44.3	52.1	39.8	21.7	14.7	37.5	18.6	33.3	5.0	38.5	24.2
Mst Cake	Qtl.	100	15.3	11.4	10.4	17.0	8.7	5.9	12.5	6.2	0.0	15.0	38.5	16.1
Grass	Rs.		387.0	491.4	413.5	835.2	326.1	300.0	425.0	639.8	266.7	400.0	307.7	467.7
TAS	Rs.		1.1	0.4	1.6	1.7	4.3	1.2	12.5	1.9	0.0	7.5	3.8	3.2
Maint.	Rs.		88.1	48.6	83.3	90.9	87.0	102.9	125.0	118.0	100.0	225.0	115.4	96.8
RON*	Rs.		3.8	3.3	6.3	11.9	4.3	7.1	25.0	7.5	33.3	42.5	11.5	32.3
<b>B. FACTOR INPUTS</b>														
Land	Rs.		3.8	1.4	5.2	1.7	2.2	2.9	12.5	1.2	0.0	2.5	38.5	16.1
Labour	M-days	23	268.2	441.4	276.0	505.7	260.9	282.4	312.5	577.6	333.3	350.0	307.7	322.6
Capital	Rs.		470.1	867.7	151.6	308.5	145.7	74.1	787.5	175.8	1000.0	145.0	330.8	591.9
<b>C. OUTPUT</b>														
Milk	Ltres	6.5	1590.0	2064.3	1322.9	1863.6	717.4	667.6	1750.0	1335.4	1333.3	875.0	1538.5	1564.5
Meat	Kg.	50	145.6	198.6	41.7	301.1	304.3	352.9	375.0	534.2	333.3	500.0	134.6	371.0
An. Head	Rs.		65.1	90.0	52.1	164.8	217.4	102.9	250.0	142.9	333.3	200.0	76.9	140.3
Manure	Qtl.	5.5	168.6	157.1	145.8	142.0	100.0	55.9	125.0	99.4	133.3	125.0	134.6	140.3
D. LSU			10	10	10	10	10	10	10	10	10	10	10	10
E. Sample Size(n)	number		11	42	5	16	7	32	2.8	16	1	11	3	4
F. Av. LSU/HH	number		5.1	2.8	6	1.5	2.1	1.5	2.7	1.3	3	.6	3.7	1.5
G. Total Households	number		251	245	16	117	22	228	3	127	1	65	7	42
H. Total LSU	number		261	700	96	176	46	340	8	161	3	40	26	62

\*Imported Material Inputs

TABLE B-7

ENTERPRISE BUDGETS FOR FISH PRODUCTION  
BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

			(Rs.Per Katha)						
ITEM	UNIT	PRICE	CASTE AND FARM SIZE						
			B-L	B-S	C-L	C-S	T-L	T-S	O-L
A. MAINTENANCE									
	M-days	23	46	56	36	46	33.5	36	46
	Rs.		4	4	4	4	4	4	4
B. <u>PURCHASED INPUTS</u>									
Fingerlings**	100	17	51	51	51	51	51	51	51
Rice bran	Qtl	150	150	120	110	150	137.5	100	130
Maize flour	Qtl	382.5	200	160	150	100	187.5	80	150
Mustard Cake	Qtl	100	25	20	25	50	6025	10	20
Manure	Qtl	5.5	7.5	5.5	5	0	6.25	0	10
Fertilizer**	Kg	4	80	40	80	35	25	40	60
Medicines**	Rs		25	5	14	10	7.5	5	25
Transport	BPM-days	100	15	40	15	100	18.75	20	20
C. <u>FACTOR INPUT</u>									
Land	Rs		175	160	170	150	125	110	120
Labor	M-days	23	35	40	25	50	62.5	40	80
D. <u>OUTPUT</u>									
Fish	Qtl	3500	1375	2200	1950	2000	1968.75	1900	2200
E. Total Area									
	Katha		40	5	20	2	16	10	10

\* 1 Katha = 0.05 bigha

\*\* Imported material inputs

TABLE B-8

ENTERPIRSE BUDGETS FOR AGRO-FORESTRY  
BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

(Rs.000/BIGHA)														
ITEM	UNIT	PRICE	CASTE AND FARM SIZE											
			B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
A. PURCHASED INPUTS														
Equipmnt*	Rs.		0.1	0.1	0.15	0.1	0.17	0.15	0.1	0.1	0.1	0.1	0.1	0.1
Saplings*	Rs.		0.3	0.4	0.35	0.35	0.5	0.35	0.3	0.3	0.25	0.3	0.3	0.3
Fencing -														
a) Barbed Wire*	Rs.		2.1	2.1	2.5	2.3	2	2	2.27	2.1	1.65	2.2	2.2	1.8
b)Timber	Rs.		0.75	0.7	0.34	0.5	0.67	0.7	0.67	0.83	1	0.8	1	1.03
Manure	Qtl.	5.5	0.05	0.05	0.1	0.05	0.07	0.04	0	0.08	0	0	0.2	0.04
B. FACTOR INPUTS														
Land rent	Rs.		2	2.1	2	2	2	2.1	2	1.83	2	2	2	1.85
Labor	M-days	23	3.25	3.2	3.16	3.25	3.34	3.2	3.34	3.34	4	4	4	3.15
C. OUTPUT														
Firewood	Rs.		2	2	2	2	2	2.1	2	2.1	2	2	2	1.85
Grass	Rs.		1.5	1.5	1.67	1.5	1.3	1.46	1.67	1.67	1	1.4	1.4	1.48
Growing-Timber	Rs.		9.25	9.2	9.34	9.25	9.34	9.2	10	9.2	10	10	10	9.25
D. Total Area														
	Bigha		4	10	3	4	1.5	4.8	0.3	1.2	0.1	0.5	0.5	2.7

\* Imported material inputs

TABLE B-9

ENTERPRISE BUDGETS FOR COMMUNITY FOREST  
USE (CFU) BY CASTE AND FARM SIZE,  
KUMROJ PANCHAYAT, 1988

(RS PER 1,000 RUPEES OUTPUT)														
ITEM	Unit	Price	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
<b>A. INPUTS</b>														
Labor	Mandays	23	990	987	909	959	909	989	857	990	500	987	928	934
Capital	Rs.*		0	3.3	45	14	0	5.6	143	2.4	475	0	72	44
RON			9.8	9.8	45	27	91	5.6	0	7.3	25	13	0	22
<b>B. OUTPUTS</b>														
Firewood	Rs.		980.39	980.39	954.55	958.90	909.09	983.15	714.29	980.39	500.00	987.65	928.57	888.89
Grass	Rs.		19.61	19.61	45.45	41.10	90.91	16.85	285.71	19.61	500.00	12.35	71.43	111.11
<b>C. Total Output (Rs. 000)</b>			10.2	30.6	2.2	7.3	1.1	35.6	0.7	20.4	0.4	8.1	1.4	2.25

TABLE B-10  
ENTERPRISE BUDGETS FOR TARAI COMMUNITY  
FOREST USE (TCFU) BY CASTE  
AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

(Rs Per Thousand Rupees Output)														
ITEM	Unit	Price	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
<u>A. INPUT</u>														
Labor	Mandays	23	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
<u>B. OUTPUT</u>	Rs. 000		1	1	1	1	1	1	1	1	1	1	1	1
(Grass)														
<u>C. Actual Output</u>	Rs.000		10	35	8	20	2	40	0.3	12	0.2	6	1.5	3
(Grass)														

TABLE B-11  
ENTERPRISE BUDGETS FOR GOVERNMENT  
FOREST USE (GFU) BY CASTE  
AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

(Rs Per Thousand Rupees Output)														
ITEM	Unit	Price	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
<b>A. INPUT</b>														
PTS	Rs.		210	112	111	48	143	78	334	23	100	41	385	59
Labor	Mandays	23	383	391	334	481	400	569	600	541	500	630	154	588
Capital	Rs.		400	496	539	460	436	341	0	426	400	312	446	341
RON*	Rs.		7	1	16	11	21	12	66	10	0	17	15	12
<b>B. OUTPUT</b>														
	Rs.	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Grass	Rs.		666.67	748.84	666.67	769.23	714.29	769.23	666.67	823.53	500.00	958.90	153.85	823.53
Firewood	Rs.		100.00	65.12	111.11	96.15	142.86	92.31	333.33	70.59	500.00	13.70	76.92	58.82
Timber	Rs.		233.33	186.05	222.22	134.62	142.86	138.46	0.00	105.88	0.00	27.40	769.23	117.65
Total Output	Rs.		30	107.5	18	52	14	130	1.5	85	1	36.5	6.5	17

\* Fee for forest use paid to forest office.



TABLE B-12  
ENTERPRISE BUDGETS FOR RICE MILL BY  
CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

ITEM	UNIT	PRICE	CASTE			
			B-L	C-L	T-L	O-L
<u>A. PURCHASED INPUTS</u>						
Diesel*	Litres	7.4	5.2	5.6	8.5	7
Mobil*	Litres	50	1.95	1.5	1.5	2
Grease*	Kg.	50	1	1	1	1.5
Tax**	Rs.		0.2	0.2	0.4	1.1
Paddy	Qtl.	425	648	638	638	808
Maize	Qtl.	330	79	83	66	94
<u>B. FACTOR INPUTS</u>						
Labor	M-hour	4.3	3.7	3.5	5.7	3.7
Maintenance		Rs.		3.25	3.5	3.5
4.1						
<u>C. OUTPUTS</u>						
Rice	Qtl.	631	582	573	573	726
Rice bran	Qtl.	150	84.5	83	83	106
Maize flour	Qtl.	382.5	86.8	91	73	103
<u>D. No. of Mills</u>						
			2	1	1	1

\* Imported Material Inputs

\*\* to government

TABLE B-13

ENTERPRISE BUDGETS FOR DRAFT ANIMALS  
BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

	UNIT	PRICE	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
<b>A. PURCHASED INPUTS</b>														
Straw	Qtl.	40	476.2	410.6	408.2	424.8	384.6	327.7	428.6	294.1	250.0	314.3	437.5	317.5
Rice bran	Qtl.	150	95.2	96.8	102.0	97.3	115.4	10.6	142.9	41.2	25.0	57.1	62.5	111.1
Mz Flour	Qtl.	382.5	57.1	44.0	51.0	39.8	19.2	14.5	28.6	17.6	25.0	5.7	62.5	31.7
Mst Cake	Qtl.	100	19.0	11.7	10.2	15.0	9.6	7.2	14.3	5.9	0.0	14.3	18.8	15.9
Grass	Rs.		333.3	381.2	367.3	380.5	326.9	301.2	300.0	341.2	175.0	371.4	312.5	333.3
TAS	Rs.		1.0	0.6	1.0	1.8	1.9	1.2	0.0	2.4	0.0	5.7	6.3	1.6
Maint.	Rs.		66.7	49.9	71.4	53.1	76.9	60.2	71.4	58.8	50.0	57.1	62.5	47.6
RON*	Rs.		5.0	3.5	0.0	11.5	11.1	7.2	14.3	14.7	50.0	11.4	11.9	6.3
<b>B. FACTOR INPUTS</b>														
Land	Rs.		9.5	2.9	2.0	1.8	1.9	2.4	0.0	1.2	0.0	2.9	6.3	1.6
Labour	M-days	23	999.0	1191.2	967.3	1373.5	1126.9	986.7	1200.0	1461.8	800.0	1214.3	1087.5	1019.0
Capital	Rs.		25.0	97.9	107.1	144.2	42.0	256.9	228.6	220.0	200.0	185.7	35.0	366.7
<b>C. OUTPUTS</b>														
An Head	Litres	6.5	38.1	67.4	40.8	61.9	25.0	57.8	142.9	64.7	250.0	82.9	62.5	55.6
Manure	Kg.	50	171.4	158.4	153.1	141.6	101.9	86.7	142.9	100.0	125.0	128.6	125.0	142.9
PTS	Rs.		1877.5	2064.5	1893.9	2339.8	1989.5	1831.3	2142.9	2294.1	1200.0	2028.6	1916.3	2054.0
D. LSU			1	1	1	1	1	1	1	1	1	1	1	1
E. Sample Size(n)	number		11	42	5	16	7	32	2	16	1	11	3	4
F. Av. LSU/HH	number		2.1	1.4	3.1	1	2.4	1.8	2.3	1.3	4	0.5	2.3	1.5
G. Total LSU	number		105	341	49	113	52	415	7	170	4	35	16	63
H. Total Household	number		51	245	16	117	22	228	3	127	1	65	7	42

\* Imported material inputs

TABLE B-14  
 ENTERPRISE BUDGETS FOR TRACTOR OPERATION  
 BY CASTE AND FARM SIZE, KUMROJ  
 PANCHAYAT, 1988

(Rs Per Hour)					
ITEM	Unit	Price	Trac-BL	Trac-TL	Trac-OL
<b>A. PURCHASED INPUTS</b>					
Diesel*	Litres	7.4	37	37	37
Mobil*	Litres	50	1.25	2.5	1.43
Grease*	Kg.	50	0.25	0.5	0.28
Maint.	Rs.		62.5	31.25	57.14
<b>B. FACTOR INPUTS</b>					
Labor	Rs.		30	60	34.3
Capital	Rs.		149	148.75	149.85
<b>C. OUTPUTS</b>					
PTS**	Rs.		280	280	280
Tractors	No.		2	1	2
Hour of operation	No.		800	200	700

\* Imported material inputs

\*\* Ploughing and transport services

TABLE B-15

ENTERPRISE BUDGET FOR TRADE AND SERVICES  
ACTIVITY (TAS) BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

(RS PER THOUSAND RUPEES OUTPUT)

ITEM	Unit	Price	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
<u>A. INPUTS</u>														
PATS	Rs.		164	108	71	91	122	41	133	42	67	24	77	63
Mainten.	Rs.		18	81	11	68	49	55	33	14	0	0	23	50
Labor	Mandays	23	365	631	250	636	390	670	360	292	500	575	308	251
Capital	Rs.		453	180	668	205	427	234	474	652	433	306	592	636
RON	Rs.		0	0	0	0	0	0	0	0	0	95	0	0
<u>B. OUTPUT</u>	Rs. 000		1	1	1	1	1	1	1	1	1	1	1	1
(TAS)														
<u>C. Output</u>														
Total	Rs. 000		55	111	92	44	41	109	15	36	6	84	13	39.8

TABLE B-16

ENTERPRISE BUDGETS FOR GRASS COLLECTING  
ACTIVITY (GCA) BY CASTE AND FARM SIZE,  
KUMROJ PANCHAYAT, 1988

(RS PER THOUSAND OUTPUT)														
ITEM	Unit	Price	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
<u>A. INPUT</u>														
Labor	Mandays	23	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
<u>B. OUTPUT</u>	<u>Rs. 000</u>		1	1	1	1	1	1	1	1	1	1	1	1
(Grass)														
<u>C. Total Output</u>														
(Grass)	Rs.000		110	394	42.6	157	27	145	3.7	127	1	14.3	9.5	41

TABLE B-17  
 ENTERPRISE BUDGETS FOR COTTAGE INDUSTRY  
 BY CASTE AND FARM SIZE, KUMROJ  
 PANCHAYAT, 1988

ITEM	UNIT	PRICE	B-S	T-S	HT-S
<u>A. INPUTS</u>					
Othr food	Rs.		0	144	0
Milk & MP	Litres	6.5	0	15	0
Timber	Rs.		0	72	63
Mainten.	Rs.		12	32	42
Labor	M-days	23	531	194	312
Capital	Rs.		162	212	583
RON	Rs.		295	331	0
<u>B. OUTPUT</u>	Rs. 000		1	1	1
C. Total Output	Rs. 000		41.4	139	47.5

TABLE B-18  
ENTERPRISE BUDGET FOR EXTERNAL MILL,  
KUMROJ PANCHAYAT, 1988

(Rs Per 000 Output)

ITEM	UNIT	PRICE	Amount
<u>A. Purchased Inputs</u>			
Paddy	Qtl	425	528
Maize	Qtl	330	66
Mustard	Qtl	1130	343
PTS	BPM-Days	56	15
<u>B. Factor Inputs</u>			
Labor	M-days	30	23
Capital	Rs.		0
RON (Processing charge)	Rs.		45
<u>C. OUTPUTS</u>			1000
Rice	Qtl	631.5	479
Rice Bran	Qtl	150	69
Maize Flour	Qtl	382.5	73
Mustard Oil	Qtl	3400	361
Mustard Cake	Qtl	100	18
Total Output	Rs. 000		1421.6

TABLE B-19  
ENTERPRISE BUDGET FOR OTHER SERVICES,  
KUMROJ PANCHAYAT, 1988

(Rs. Per 000 Output)			
ITEM	UNIT	PRICE	AMOUNT (Rs.)
<u>A. Purchased Inputs</u>			
Rice	Qtl	631	4
Mstrd Oil	Litres	34	1.7
Milk & MP	Litres	6.5	5.4
Meat	Kg	50	14.6
Fish	Kg	35	2.8
Grass	Rs.		56.7
Timber	Rs.		10.7
PTS	BPM-days	56	2.6
CIPs	Rs.		6
<u>B. Factor Inputs</u>			
Labor	M-days	23	35.5
Capital	Rs.		0
RON	Rs.		859.1
<u>C. Outputs</u>			1000.0
Maintenance	Rs.		160
Non-food	Rs.		680.9
Social Services	Rs.		159.1
Total Output (Rs.000)			4869.5



TABLE B-20  
HOUSEHOLD CONSUMPTION EXPENDITURE  
BY CASTE AND FARM SIZE, KUMROJ  
PANCHAYAT, 1988

ITEM	(RS.000 PER HOUSEHOLD)											
	Caste and Farm Size											
	B-L	B-S	C-L	C-S	T-L	T-S	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S
<b>A. FOOD</b>	<b>15.93</b>	<b>11.52</b>	<b>16.62</b>	<b>9.81</b>	<b>13.31</b>	<b>9.68</b>	<b>15.7</b>	<b>8.33</b>	<b>11.5</b>	<b>5.93</b>	<b>17.55</b>	<b>8.16</b>
Rice	2.9	2.84	3.12	3.23	4.41	5.86	3	3.05	3	2.88	3	3.1
Maize	0.04	0.13	0.06	0.14	0.04	0.12	0.07	0.17	0.2	0.05	0.06	0.08
Maize Flour	0.45	0.48	0.44	0.45	0.32	0	0.27	0.61	0.5	0.61	0.33	0.22
Mustard Oil	1	0.68	1.06	0.67	1.54	0.5	0.34	0.64	0.3	0.18	0.14	0.37
Other Foods		3.9	2.43	4.19	2.55	1.91	1.5	4.34	1.67	2.5	1.38	5.72.02
Milk & Milk Products		5.88	4.26	5	1.96	1	0.65	4.67	1.5	4	0.43	5.41.55
Meat	1.29	0.53	2	0.6	1.82	0.37	2.34	0.38	0.6	0.23	2.28	0.59
Fish	0.47	0.17	0.75	0.21	2.27	0.68	0.67	0.31	0.4	0.17	0.64	0.23
<b>B. FUEL/LIGHTING</b>	<b>1.61</b>	<b>0.77</b>	<b>1.4</b>	<b>0.62</b>	<b>1.3</b>	<b>0.65</b>	<b>1.61</b>	<b>0.39</b>	<b>1.7</b>	<b>0.27</b>	<b>1.38</b>	<b>0.83</b>
Maize Cobb/Straw 0.06		0.41	0.16	0.15	0.11	0.23	0.06	0.34	0.07	0.2	0.06	0.14
Mustard Straw 0.01		0.06	0.02	0.06	0.02	0.04	0.01	0.03	0.01	0	0.01	0.14
Cowdung	0	0	0	0	0.12	0.1	0	0	0	0	0	0
Firewood	0.7	0.39	0.79	0.24	0.63	0.26	0.9	0.14	1	0.1	0.6	0.4
Kerosene Oil		0.44	0.2	0.4	0.25	0.28	0.22	0.34	0.17	0.5	0.1	0.50.36
<b>C. NON-FOOD</b>	<b>9.61</b>	<b>3.29</b>	<b>11.25</b>	<b>3.3</b>	<b>7</b>	<b>3</b>	<b>10.7</b>	<b>1.97</b>	<b>5.35</b>	<b>1.7</b>	<b>12.6</b>	<b>3.6</b>
Clothes	3.4	1.8	3.55	1.4	3.2	1.24	4.6	1.1	2.5	0.9	4.5	1.1
Education*	2.3	0.47	2	0.38	0.35	0.15	2.14	0.13	0.15	0.05	3.1	0.4
Medicines	1.87	0.17	1.5	0.25	0.95	0.4	0.95	0.16	1.3	0.28	1.5	0.6

TABLE B-20 (continued)

(RS.000 PER HOUSEHOLD)

ITEM	Caste and Farm Size											
	BL	BS	CL	CS	TL	TS	HTL	HTS	LoL	LoS	OL	O-S
Soap	0.5	0.18	1.1	0.32	0.31	0.15	0.68	0.15	0.3	0.12	0.6	0.34
Travelling	0.82	0.24	1.2	0.29	0.49	0.2	1.44	0.1	0.2	0.1	1.2	0.5
Cinema	0.22	0.06	0.9	0.07	0.67	0.25	0.38	0.02	0.15	0.05	0.6	0.13
Smoking/Chewing	0.3	0.25	0.5	0.37	0.53	0.3	0.4	0.09	0.64	0.1	0.6	0.35
Beverages	0.15	0.1	0.4	0.2	0.48	0.3	0.1	0.22	0.1	0.1	0.3	0.15
Others	0.05	0.02	0.1	0.02	0.02	0.01	0.01	0	0.01	0	0.2	0.03
<b>D. TRADE &amp; SERVICES</b>	<b>235</b>	<b>088</b>	<b>3.83</b>	<b>1.39</b>	<b>1.64</b>	<b>1.03</b>	<b>3.07</b>	<b>06</b>	<b>18</b>	<b>0.72</b>	<b>5.3</b>	<b>1.55</b>
Stitching	0.53	0.22	0.6	0.3	0.43	0.24	0.5	0.14	0.26	0.15	0.8	0.27
Haircut	0.17	0.07	0.15	0.1	0.1	0.1	0.1	0.05	0.25	0.08	0.2	0.12
Health Service	0.9	0.13	0.4	0.1	0.3	0.05	0.1	0.1	0.1	0.05	0.5	0.3
Blacksmith	0.29	0.24	0.03	0.03	0.03	0.03	0.03	0.03	0.22	0.01	0.03	0.03
Retailers	0.46	0.22	2.65	0.86	0.78	0.61	2.34	0.28	0.97	0.43	3.77	0.83
<b>E. Transport (PATA)</b>	<b>0.98</b>	<b>0.27</b>	<b>0.87</b>	<b>0.16</b>	<b>0.77</b>	<b>0.17</b>	<b>1</b>	<b>0.08</b>	<b>0.2</b>	<b>0.02</b>	<b>1.07</b>	<b>0.02</b>
<b>F. Social Expenses</b>	<b>3.32</b>	<b>0.81</b>	<b>3.73</b>	<b>0.76</b>	<b>2.04</b>	<b>0.44</b>	<b>2.97</b>	<b>0.31</b>	<b>3.25</b>	<b>0.23</b>	<b>1.4</b>	<b>0.94</b>
<b>G. Cot Ind Prodcfs</b>	<b>0.07</b>	<b>0.05</b>	<b>1.06</b>	<b>0.06</b>	<b>0.41</b>	<b>0.14</b>	<b>0.83</b>	<b>0.18</b>	<b>3.1</b>	<b>0.12</b>	<b>0.53</b>	<b>0.17</b>
<b>H. FACTOR USE(Labor)</b>	<b>0.14</b>	<b>0.05</b>	<b>0.12</b>	<b>0.03</b>	<b>0.09</b>	<b>0.03</b>	<b>0.17</b>	<b>0.02</b>	<b>0.2</b>	<b>0.02</b>	<b>0.17</b>	<b>0.05</b>
<b>I. Inter Instn. Transfer</b>	<b>2.11</b>	<b>0.712</b>	<b>2.81</b>	<b>0.712</b>	<b>2.134</b>	<b>0.55</b>	<b>3.15</b>	<b>0.42</b>	<b>1.26</b>	<b>0.3</b>	<b>2.95</b>	<b>0.462</b>
Community	2.1	0.71	2.8	0.71	2.13	0.55	3.12	0.42	1.26	0.3	2.94	0.46
Lower Cost	0.01	0.002	0.01	0.002	0.004	0	0.03	0	0	0	0.01	0.002

TABLE B-20 (continued)

ITEM	(RS.000 PER HOUSEHOLD)											
	Caste and Farm Size											
	BL	BS	CL	CS	TL	TS	HT-L	HT-S	Lo-L	Lo-S	OL	OS
J. RCN	03	01	0.75	0.02	0.32	0.05	0.34	0.06	0.25	0.03	21	0.04
Land Tax	0.2	0.04	0.24	0.01	0.22	0.04	0.17	0.01	0.25	0.02	0.3	0.02
Mill Tax	0.01	0	0.02	0	0.02	0	0	0	0	0	0.15	0
Others	0.09	0.06	0.49	0.01	0.08	0.01	0.17	0.05	0	0.01	1.65	0.02
K. FINANCIAL	17.92	5.85	20.36	3.43	12.39	2.51	23.04	2.49	4.2	2.44	28.76	3.71
Loan Repaid(Pvt)	2.94	0.82	3.12	0.32	1.27	0.13	6.67	0.14	0	0.02	6.4	0.59
Loan Repaid(Pub)	5.03	2.03	8.31	1.36	2.77	0.43	12	0.5	1.6	1.17	6.4	1.53
Interest (Pvt)	1.31	0.43	1.6	0.3	0.68	0.2	1.8	0.18	1.1	0.18	0.96	0.48
Interest(Pub)	1.7	0.62	0.86	0.25	0.25	0.13	0.57	0.08	0.2	0.19	0.3	0.19
Saving (Pvt)	6.94	1.95	6.47	1.2	7.42	1.62	2	1.59	1.3	0.88	14.7	0.92
L. Maintenance	0.98	0.48	2.4	0.25	0.54	0.19	1.5	0.16	0.8	0.16	3.6	0.37
M. Total # of HH	51	245	16	117	22	228	3	127	1	65	7	42
Total Expenditure	55.32	24.78	65.2	20.54	41.94	18.44	64.08	15.01	33.61	11.94	77.41	19.90

\* Expenditure on education within the village system has been included in transfer to community. See community Enterprise Budget for details.

TABLE B-21

HIRED LABOR AS PROPORTION OF TOTAL LABOR  
USED, BY CASTE AND FARM SIZE,  
KUMROJ PANCHAYAT, 1988

(PERCENT)													
ACTIVITY	BL	BS	CL	CS	TL	T-S	HT-L	HT-S	LO-L	Lo-S	OL	O-S	RON
Paddy	0.87 (.52)	0.69 (.34)	0.92 (.40)	0.65 (.34)	0.65 (.07)	0.33 (.03)	0.30 (.06)	0.13 (.04)	0.60 (0.0)	0.17 (0.0)	0.97 (.18)	0.57 (.17)	
Maize	0.64 (.25)	0.45 (.07)	0.80 (.17)	0.45 (.15)	0.27 (.05)	0.16 (.01)	0.10 (0.0)	0.07 (0.0)	0.22 (0.0)	0.12 (0.0)	0.88 (.06)	0.27 (.14)	
Mustrd	0.69 (.25)	0.44 (.10)	0.90 (.16)	0.79 (.12)	0.27 (0.0)	0.13 (0.0)	0.48 (0.0)	0.10 (0.0)	0.22 (0.0)	0.14 (0.0)	0.85 (.06)	0.21 (.03)	
Others	0.58 (.07)	0.29 (0.0)	0.83 (0.0)	0.18 (0.0)	0.00 (0.0)	0.12 (0.0)	0.00 (0.0)	0.00 (0.0)	0.00 (0.0)	0.08 (0.0)	0.78 (0.0)	0.58 (0.0)	
Sub-TTI	0.90	0.66	0.92	0.54	0.68	0.24	0.91	0.09	0.80	0.13	0.98	0.39	
Livstk	0.16	0.03	0.60	0.06	0.14	0.17	0.20	0.01	0.20	0.09	0.38	0.11	
PATA	0.69	0.29	0.66	0.14	0.63	0.14	0.65	0.09	0.59	0.11	0.88	0.60	
Fish(P)	0.86	0.75	0.80	0.60	0.80	0.00					0.88		
Fish(C)													
Frstry(P)	0.77	0.19	0.71	0.62	0.50	0.35	0.90	0.38	0.75	0.10	0.95	0.53	
CFU	0.41	0.07	0.45	0.29	0.00	0.00	0.33	0.05	0.50	0.00	0.92	0.14	
TCFU	0.60	0.06	0.50	0.15	0.00	0.00	0.00	0.08	0.50	0.00	0.80	0.33	
GFU	0.87	0.17	0.92	0.32	0.38	0.00	0.78	0.07	0.80	0.00	0.90	0.20	
Mill	0.19		0.71		0.07						0.78		
CI		0.63 (0.0)				0.07 (.01)		0.07 (0.0)					
TAS	0.25 (.05)	0.00 (0.0)	0.12 (.03)	0.04 (.007)	0.06 (.01)	0.01 (.003)	0.07 (.02)	0.05 (.01)	0.67 (0.0)	0.00 (0.0)	0.25 (0.0)	0.05 (.01)	
GCA	0.32	0.01	0.28	0.04	0.07	0.00	0.00	0.02	0.60	0.00	0.68	0.02	
Othr Servc	0.95	0.83	0.91	0.60	0.81	0.49	0.96	0.55	1.00	0.65	0.94	0.84	
HH Use	0.71	0.25	0.75	0.25	0.25	0.00	0.20	0.00	0.00	0.00	0.67	0.50	
Commty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
External	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	
Ext-mill	1.00	0.38	1.00	0.20	1.00	0.11		0.00		0.00	1.00	0.20	
Capit F	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	
TOTAL:	0.67	0.32	0.60	0.28	0.55	0.14	0.60	0.06	0.61	0.07	0.73	0.34	
DISTRIBUTION*	0	0.118	0	0.096	0	0.269	0	0.127	0	0.107	0	0.072	0.211

\* DISTRIBUTION OF HIRED LABOR AMONG HOUSEHOLDS AND RON Figures in ( ) show portion of total labor fulfilled by import

**APPENDIX C**

**MISCELLANEOUS DATA**

TABLE C-1  
EMPLOYMENT STATUS AND OTHER CONVERSION  
FACTORS, NEPAL

1. Days available for work/person/year for rural Tarai

Male : 253; Female : 148

2. Unemployment for rural labor force for Nepal:

Farm Size	Unemploy- ment %
Large	2.3
Medium	2.5
Small	3.3
Marginal	4.2
Non-Cultivator	0.4
All	2.7
Rural Tarai	3.0

3. Underemployment of rural family labor days : 46.4 percent

4. Man equivalent :

Aged : 0.5

Youth : 0.5

Adult : 1

Children : 0

5. Consumer Unit Equivalent :

Age of Person	Male	Female
Aged	0.9	0.70
Adult	1.0	0.80
Youth	0.8	0.75
Children	0.5	0.50

6. Livestock Unit Coefficient :

Age	Cattle	Buffalo	Goats
Young	0.26	0.37	0.00
Immature	0.60	0.83	0.05
Adult	0.80	1.10	0.10
Aged	0.80	1.10	0.10

Source : Nepal Rastra Bank (1989). Multiple Household Budget Survey, Kathmandu

DFAMS, Ministry of Agriculture (1986). Main Report on National Farm Management Study : Nepal (1983-1985) Kathmandu

TABLE C-2

**MANDAYS OF LABOR AVAILABLE BY CASTE AND  
FARM SIZE, KUMROJ PANCHAYAT, 1988**

A AGEWISE AVERAGE HOUSEHOLD SIZE <sup>1</sup>									
	Old	Adult		Child Less than 10	Non- Student(10-14)		Student More than 10		Total
		M	F		M	F	M	F	
B-L	0.5	1.4	1.5	2	0	0	1	1	7.4
B-S	0.3	1.3	1.4	2.1	0	0.07	0.83	0.6	6.6
C-L	0.2	1.6	1.8	2.2	0	0	1.2	0.6	7.6
C-S	0.2	1.3	2	1.6	0	0.1	1.3	0.7	7.2
T-L	0.3	1.3	1.8	2.7	0	0.3	0.1	0.5	7
T-S	0.6	1.9	1.9	2.8	0.05	0.36	0.64	0.1	8.35
HT-L	0.5	1.5	1.5	0.7	0	0	1.5	0	5.7
HT-S	0.1	1.8	1.9	1.4	0.1	0.6	0.2	0.1	6.2
Lo-L	1	1	1	2	0	0	0	1	6
Lo-S	0.1	1.4	1.3	2.7	0.8	0.5	0.1	0.1	7
O-L	0.1	1.3	2	2	0	0	1.5	0.3	7.2
O-S	0.2	1.2	1.4	1.6	0	0	0.7	0.6	5.7

B AGEWISE CASTEWISE POPULATION <sup>2</sup>									
B-L	25.5	71.4	76.5	102	0	0	51	51	377.4
B-S	73.5	318.5	343	514.5	0	17.15	203.35	147	1617
C-L	3.2	25.6	28.8	35.2	0	0	19.2	9.6	121.6
C-S	23.4	152.1	234	187.2	0	11.7	152.1	81.9	842.4
T-L	6.6	28.6	39.6	59.4	0	6.6	2.2	11	154
T-S	136.8	433.2	433.2	638.4	11.4	82.08	145.92	22.8	1903.8
HT-L	1.5	4.5	4.5	2.1	0	0	4.5	0	17.1
HT-S	12.7	228.6	241.3	177.8	12.7	76.2	25.4	12.7	787.4
Lo-L	1	1	1	2	0	0	0	1	6
Lo-S	6.5	91	84.5	175.5	52	32.5	6.5	6.5	455
O-L	0.7	9.1	14	14	0	0	10.5	2.1	50.4
O-S	8.4	50.4	58.8	67.2	0	0	29.4	25.2	239.4

C MANDAYS PER YEAR PER PERSON IN MAN-EQUIVALENT <sup>3</sup>									
	0	253	148	0	39	54	21	31	

D TOTAL MANDAYS <sup>4</sup>									
B-L	0	18064.2	11322	0	0	0	1071	1581	32038.2
B-S	0	80580.5	50764	0	0	926.1	4270.35	4557	141097.9
C-L	0	6476.8	4262.4	0	0	0	403.2	297.6	11440
C-S	0	38481.3	34632	0	0	631.8	3194.1	2538.9	79478.1
T-L	0	7235.8	5860.8	0	0	356.4	46.2	341	13840.2
T-S	0	109599.6	64113.6	0	444.6	4432.32	3064.32	706.8	182361.2
HT-L	0	1138.5	666	0	0	0	94.5	0	1899
HT-S	0	57835.8	34712.4	0	495.3	4114.8	533.4	393.7	99085.4
Lo-L	0	253	148	0	0	0	0	31	432
Lo-S	0	23023	12506	0	2028	1755	136.5	201.5	39650
O-L	0	2302.3	2072	0	0	0	220.5	65.1	4659.9
O-S	0	12751.2	8702.4	0	0	0	617.4	781.2	22852.2
TOTAL	0	357742	230761.6	0	2967.9	12216.42	13651.47	11494.8	628834.1

M = Male  
F = Female

<sup>1</sup> Source: Sample survey

<sup>2</sup> Source: Sample survey

<sup>3</sup> Source: Nepal Rastra Bank (1989)

<sup>4</sup> Column in part B x column in part C

TABLE C-3  
PRODUCTION BEHAVIOR UNDER DIFFERENT  
TECHNOLOGY SETS

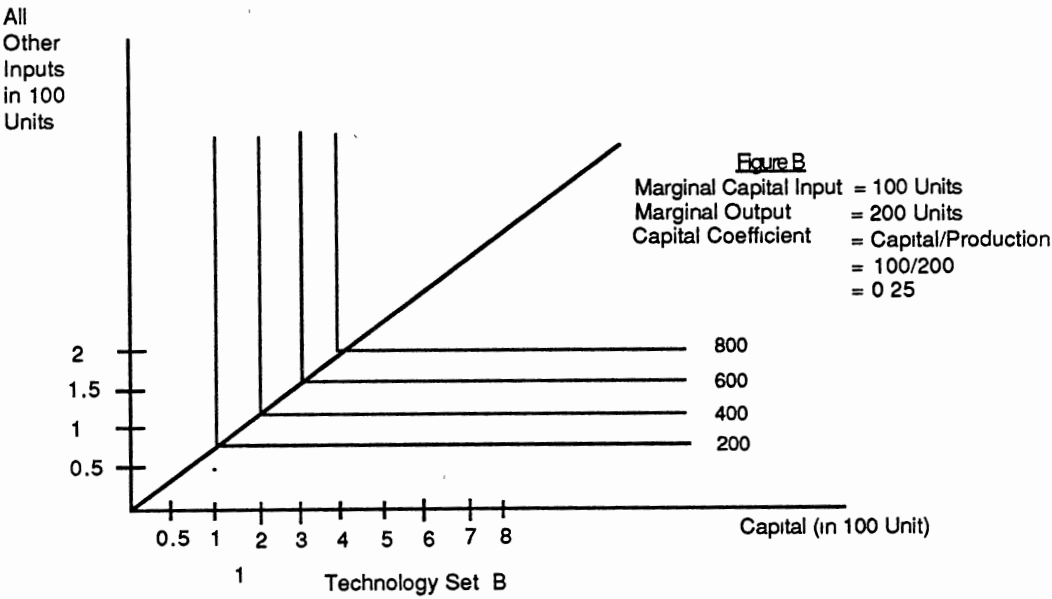
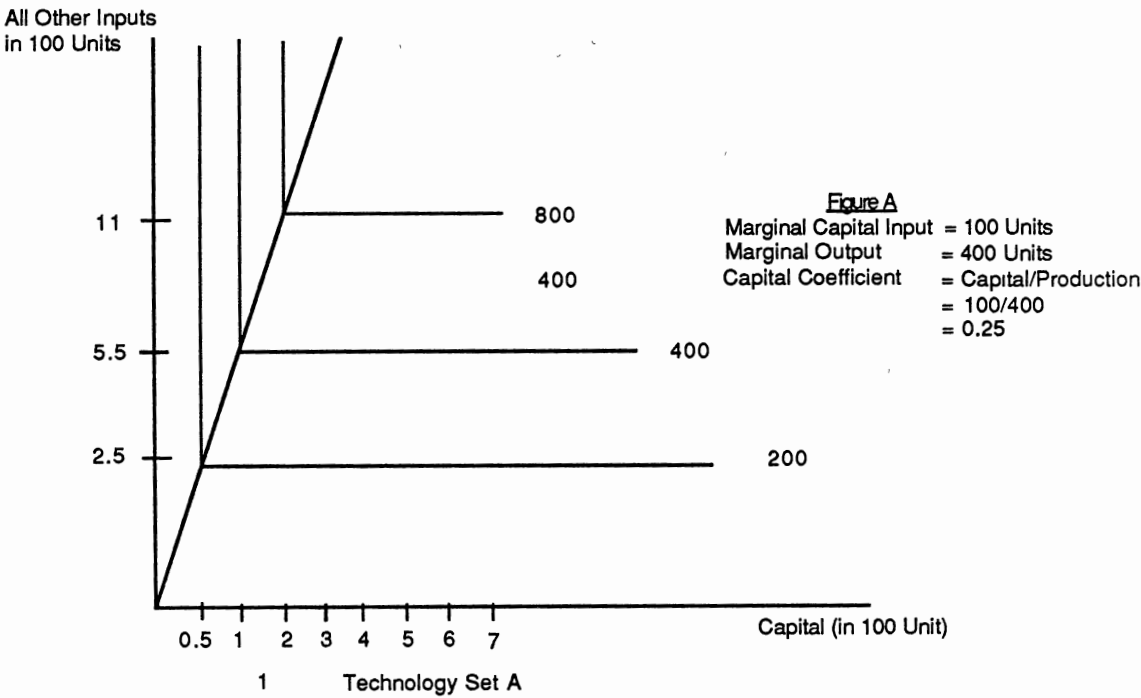




TABLE C-4  
LOAN OPERATION OF SFDP, KUMROJ BY PURPOSE  
AND CASTE (1983/84 - 1988/89)

(Rs 000)

(Rs 000)

Year and Purpose of Loan	Caste, Loan Disbursement, and Loan Collection													
	Brahman		Chhettri		Tharu		Hill Tribes		Lower Castes		Other Castes		TOTAL	
	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion
<u>1983/84</u>														
Cereal Crops <sup>1</sup>	15				6				2				23	0
Cash Crops <sup>2</sup>													0	0
Irrigation	28	5			17				4				49	5
Mechanisation <sup>3</sup>	22				20				3				45	0
Livestock <sup>4</sup>	13	5			11								24	5
Cottage Industry and Marketing <sup>5</sup>													0	0
Horticulture													0	0
Others <sup>6</sup>													0	0
Sub-Total	78	10	0	0	54	0	0	0	9	0	0	0	141	10
<u>1984/85</u>														
Cereal Crops	15	15	4	4	8	8	1	1	1	1	0	0	29	29
Cash Crops	21	18	0	0	8	8	0	0	1	1	0	0	30	27
Irrigation	49	7	64	3	9	1	0	0	10	4	9	2	141	17
Mechanisation	19	5	5	1	17	4	5	2	1	0	0	0	47	12
Livestock	32	5	3	1	8	1	3	0	12	3	0	0	58	10
Cottage Industry and Marketing	13	1	0	0	4	0	5	0	11	0	0	0	33	1
Horticulture	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	149	51	76	9	54	22	14	3	36	9	9	2	338	96

TABLE C-4 (continued)

Year and Purpose of Loan	Caste, Loan Disbursement, and Loan Collection													
	Brahman		Chhettri		Tharu		Hill Tribes		Lower Castes		Other Castes		TOTAL	
	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion
<u>1985/86</u>														
Cereal Crops	34	32	12	5	24	13	2	1	2	2	2	1	76	54
Cash Crops	32	18	14	6	3	12	0	0	0	1	1	0	50	37
Irrigation	175	10	60	3	21	1	20	0	10	4	25	0	311	18
Mechanisation	28	11	13	3	37	6	0	0	7	1	0	0	85	21
Livestock	111	21	25	1	6	0	1	0	8	7	0	0	151	29
Cottage Industry and Marketing	11	10	0	0	3	1	0	1	0	1	2	0	16	13
Horticulture	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Sub-Total	391	102	124	18	94	33	23	2	27	16	30	1	689	172
<u>1986/87</u>														
Cereal Crops	134	67	18	3	13	11	3	0	12	7	2	0	182	88
Cash Crops	23	23	7	5	11	7	0	0	1	1	0	0	42	36
Irrigation	31	31	5	11	11	1	4	3	7	0	0	1	58	47
Mechanisation	61	14	13	7	29	12	0	0	2	3	0	0	105	36
Livestock	195	51	23	8	18	6	10	2	5	2	7	0	258	69
Cottage Industry and Marketing	16	4	0	1	12	3	0	1	0	0	14	0	42	9
Horticulture	17	0	0	0	0	0	0	0	0	0	0	0	17	0
Others	<u>25</u>	<u>0</u>	<u>23</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>48</u>	<u>0</u>
Sub-Total	502	190	89	35	94	40	17	6	27	13	23	1	752	285

TABLE C-4 (continued)

Year and Purpose of Loan	Caste, Loan Disbursement, and Loan Collection													
	Brahman		Chhettri		Tharu		Hill Tribes		Lower Castes		Other Castes		TOTAL	
	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion	Disburse- ment	Collec- tion
<b>1987/88</b>														
Cereal Crops	168	97	28	12	23	18	7	5	22	6	0	1	248	139
Cash Crops	87	52	12	7	11	13	0	0	5	4	0	0	115	76
Irrigation	33	78	15	34	0	5	0	3	10	5	0	2	58	127
Mechanisation	112	42	29	4	11	15	10	2	0	4	4	0	166	67
Livestock	254	143	37	19	17	1	20	5	23	13	0	1	351	182
Cottage Industry and Marketing	33	7	0	4	90	8	0	3	0	2	0	1	0	0
Horticulture	19	0	0	0	0	0	0	0	0	0	0	0	123	25
Others	25	1	3	0	115	0	0	0	0	0	0	0	19	0
Sub-Total	731	420	124	80	267	60	37	18	60	34	4	5	1223	617
<b>1988/89</b>														
Cereal Crops	170	221	14	25	19	29	5	5	13	31	3	4	224	315
Cash Crops	68	74	2	3	0	6	3	6	0	6	0	0	73	95
Irrigation	79	83	3	32	22	25	8	9	2	9	3	10	117	168
Mechanisation	89	62	25	13	5	27	0	3	16	9	7	4	142	118
Livestock	294	178	28	25	26	7	7	15	47	29	0	1	402	255
Cottage Industry and Marketing	8	7	2	1	5	36	0	2	0	0	0	1	0	0
Horticulture	12	2	0	0	0	0	0	0	0	0	2	0	15	47
Others	0	6	0	22	0	3	0	0	0	0	0	0	14	2
Sub-Total	720	633	74	121	77	133	23	40	78	84	15	20	987	1031
Total	2571	1406	487	263	640	288	114	69	237	156	81	29	4130	2211

1. Paddy, wheat, etc.

2. Mustard, potato, other vegetables, etc.

3. Draft animals, carts, seed bins, plough, etc

4. Milking cows &amp; buffaloes, heifers, goats, sheep, etc.

5. Blacksmithy, carpentry, tile making, handlooms, medicines store, marketing, etc.

TABLE C-5

ALLOCATION OF INVESTABLE LOAN FOR LIVESTOCK,  
KUMROJ PANCHAYAT, 1988

Caste and Farm Size	Invest-able fund (Private)	Amount invested on Livestock	Invest-able fund (NBL)	Amount invested on Livestock	Investable fund for Livestock (SFDP)	Total Amount	Percent
<b>A.</b>							
Brahman-Large	215	12	45	1	31.0	44 0	(9.4)
Brahman-Small	272	24	105	7	241.5	272 5	(58.3)
Chhettri-Large	74	4	40	2	4	10	(2.1)
Chhettri-Small	30	2	25	0.5	23	25.5	(5.5)
Tharu-Large	34	1.5	15	0.4	4	5.9	(1.3)
Tharu-Small	54	6.5	6	0.3	21	27.8	(5.9)
Hill Tribe-Large	12	0.7	30	1	--	1.7	(.5)
Hill Tribe-Small	27	1.3	10	0.2	26	27.5	(5.9)
Lower-Large	0	--	1	--	--	--	--
Lower-Small	6	0.5	1	--	45.5	46	(9.8)
Other-Large	17	2	40	4	--	6	(1.3)
Other-Small	5	0.5	5	--	--	0 5	(0.1)
Total	746	55	323	16.4	396	467.4	
Percent		(11.7)		(3.5)	(84.8)	(100)	
<b>B</b>							
	Private	NBL	SFDP	Total			
Total Loan (Rs 000)	1345	854	1028	3227			

TABLE C-6  
ITEMIZED EXPENDITURE UNDER CAPITAL  
FORMATION FOR KUMROJ PANCHAYAT,  
1988/89

	<u>ITEM</u>	<u>RS. 000</u>
A)	Within Kumroj Panchayat	
	Commodity	
	Animal Head	85.4
	Grass	47.0
	Timber	320.0
	Transport Service	<u>3.0</u>
	Sub-Total	455.4
	Factor	
	Labor	<u>25.0</u>
	Total	480.4
B)	Rest-of-Nepal	
	Non-commodity	
	Deposit in bank	
	Households	200.0
	Community	128.0
	Land Purchase	575.0
	House Construction	<u>423.0</u>
	Sub-Total	1326.0
	Commodity (Import)	
	Animal head	210.0
	Durables	525.0
	Irrigation Materials	68.0
	Mechanization	85.0
	Construction materials for constructing houses within Kumroj Panchayat	<u>380.18</u>
	Sub-Total 1268.13	
	Total	2594.13

APPENDIX D

SOCIAL ACCOUNTING MATRIX (SAM) AND  
INTERDEPENDENCE COEFFICIENTS  
MATRIX FOR THE KUMROJ  
PANCHAYAT, NEPAL,  
1988

Social Accounting Matrix  
Account Identification

CASTE AND FARM SIZE												
	BRAHMAN		CHHETTRI		THARU		HILL-TRIBE		LOWER		OTHERS	
	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small	Large	Small
<b>ACTIVITY ACCOUNT</b>												
A1:Cropping System	A1-BL	A1-BS	A1-CL	A1-CS	A1-TL	A1-TS	A1-HTL	A1-HTS	A1-LL	A1-LS	A1-OL	A1-OS
A2:Livestock	A2-BL	A2-BS	A2-CL	A2-CS	A2-TL	A2-TS	A2-HTL	A2-HTS	A2-LL	A2-LS	A2-OL	A2-OS
A3:Fishery (Pvt).	A3-BL	A3-BS	A3-CL	A3-CS	A3-TL	A3-TS	A3-HTL	A3-HTS	A3-LL	A3-LS	A3-OL	A3-OS
A4:Fishery (COM)					A4-TL	A4-TS		A4-HTS				
A5:Forestry (Pvt)	A5-BL	A5-BS	A5-CL	A5-CS	A5-TL	A5-TS	A5-HTL	A5-HTS	A5-LL	A5-LS	A5-OL	A5-OS
A6:COM Forest Use	A6-BL	A6-BS	A6-CL	A6-CS	A6-TL	A6-TS	A6-HTL	A6-HTS	A6-LL	A6-LS	A6-OL	A6-OS
A7:Tara COM Frst Use	A7-BL	A7-BS	A7-CL	A7-CS	A7-TL	A7-TS	A7-HTL	A7-HTS	A7-LL	A7-LS	A7-OL	A7-OS
A8:Governmt Forest Use	A8-BL	A8-BS	A8-CL	A8-CS	A8-TL	A8-TS	A8-HTL	A8-HTS	A8-LL	A8-LS	A8-OL	A8-OS
A9:Mill	A9-BL		A9-CL		A9-TL						A9-OL	
A10:Ploughing & Tnsprt	A10-BL	A10-BS	A10-CL	A10-CS	A10-TL	A10-TS	A10-HTL	A10-HTS	A10-LL	A10-LS	A10-OL	A10-OS
A11:Trade & Services	A11-BL	A11-BS	A11-CL	A11-CS	A11-TL	A11-TS	A11-HTL	A11-HTS	A11-LL	A11-LS	A11-OL	A11-OS
A12:Grass Collecting	A12-BL	A12-BS	A12-CL	A12-CS	A12-TL	A12-TS	A12-HTL	A12-HTS	A12-LL	A12-LS	A12-OL	A12-OS
A13:Cottage Industry		A13-BS				A13-TS		A13-HTS				
<b>FACTOR ACCOUNT</b>												
Ld:Land	Ld-BL	Ld-BS	Ld-CL	Ld-CS	Ld-TL	Ld-TS	Ld-HTL	Ld-HTS	Ld-LL	Ld-LS	Ld-OL	Ld-OS
Lb:Labor	Lb-BL	Lb-BS	Lb-CL	Lb-CS	Lb-TL	Lb-TS	Lb-HTL	Lb-HTS	Lb-LL	Lb-LS	Lb-OL	Lb-OS
K : Capital	K -BL	K -BS	K -CL	K -CS	K -TL	K -TS	K -HTL	K -HTS	K -LL	K -LS	K -OL	K -OS

Ld-LSD: Land Leased

Lb-HRD: Labor Hired

# Social Accounting Matrix Account Identification (continued)

## COMMODITY ACCOUNT

C1 : Paddy  
C2 : Straw  
C3 : Rice  
C4 : Rice Bran  
C5 : Maize  
C6 : Maize Cobbs  
C7 : Maize Flour  
C8 : Mustard  
C9 : Mustard ByProduct  
C10: Mustard Oil  
C11: Mustard Cake  
C12: Other Foods  
C13: Other Food ByProduct

C14 : Milk & Milk Products  
C15 : Meat  
C16 : Animal Heads  
C17 : Manure  
C18 : Fish  
C19 : Grass  
C20 : Fuel/Lighting  
C21 : Timber  
C22 : P&T Services  
C23 : Non-foods  
C24 : Social Expenses  
C25 : Trade & Services  
C26 : CIPs  
C27 : Maintenance

## INSTITUTION ACCOUNT

B-L : Brahman Large Household  
B-S : Brahman Small Household  
C-L : Chhettri Large Household  
C-S : Chhettri Small Household  
T-L : Tharu Large Household  
T-S : Tharu Small Household  
HT-L : Hill Tribe Large Household  
HT-S : Hill Tribe Small Household  
Lo-L : Lower Caste Large Household  
Lo-S : Lower Caste Small Household  
O-L : Others Caste Large Household  
O-L : Other Caste Small Household  
COM : Community

## FINANCIAL ACCOUNT

FA1 : Loan Receipt (Pvt)  
FA2 : Loan Receipt (Pub)  
FA3 : Loan Repayment (Pvt)  
FA4 : Loan Repayment (Pub)  
FA5 : Interest (Pvt)  
FA6 : Interest (Pub)  
FA7 : Wealth  
FA8 : Saving (Pvt)  
FA9 : Saving (Pub)  
  
RON: Rest of Nepal

Ld-LSD: Land Leased  
Lb-HRD: Labor Hired



## APPENDIX D-1

### SOCIAL ACCOUNTING MATRIX (SAM) FOR THE KUMROJ PANCHAYAT, NEPAL, 1988

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
A1-BL	0	1843	229			471	21		562	3			250	1				
A2-BL	0														415	38	17	44
A3-BL	0																	
A5-BL	0																	
A6-BL	0																	
A7-BL	0																	
A8-BL	0																	
A9-BL	0			1164	169			173.7										
A10-BL	0																4	18
A11-BL	0																	
A12-BL	0																	
A1-BS	0	2802	353			859	38		846	4			478	1				
A2-BS	0														1445	139	63	110
A3-BS	0																	
A5-BS	0																	
A6-BS	0																	
A7-BS	0																	
A8-BS	0																	
A10-BS	0																23	54
A11-BS	0																	
A12-BS	0																	
A13-BS	0																	
A1-CL	0	631	74			59	2.4		180	1			24					
A2-CL	0														127	4	5	14
A3-CL	0																	
A5-CL	0																	
A6-CL	0																	
A7-CL	0																	
A8-CL	0																	
A9-CL	0			573	83			91										
A10-CL	0																2	7.5
A11-CL	0																	
A12-CL	0																	
A1-CS	0	1125	142			271	13		351	2			151					
A2-CS	0														328	53	29	25
A3-CS	0																	
A5-CS	0																	
A6-CS	0																	
A7-CS	0																	
A8-CS	0																	
A10-CS	0																7	16
A11-CS	0																	
A12-CS	0																	

	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-Bs	Ld-CL	Ld-CS	Ld-TL	- - - -	Total
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	- - - -	216
A1-BL																	3380
A2-BL																	514
A3-BL	105																105
A5-BL		6	8	37													51
A6-BL		10	0.2	0													10.2
A7-BL		10	0	0													10
A8-BL		20	3	7													30
A9-BL																	1506.7
A10-BL					421.1												443.1
A11-BL								55									55
A12-BL		110															110
A1-Bs																	5381
A2-Bs																	1757
A3-Bs	11																11
A5-Bs		15	20	92													127
A6-Bs		30	0.6	0													30.6
A7-Bs		35	0	0													35
A8-Bs		80.5	7	20													107.5
A10-Bs					704												781
A11-Bs								111									111
A12-Bs		394															394
A13-Bs									41.4								41.4
A1-CL																	971.4
A2-CL																	150
A3-CL	39																39
A5-CL		5	6	28													39
A6-CL		2.1	0.1	0													2.2
A7-CL		8	0	0													8
A8-CL		12	2	4													18
A9-CL																	747
A10-CL					92.8												102.3
A11-CL								92									92
A12-CL		42.6															42.6
A1-CS																	2055
A2-CS																	435
A3-CS	4																4
A5-CS		6	8	37													51
A6-CS		7	0.3	0													7.3
A7-CS		20	0	0													20
A8-CS		40	5	7													52
A10-CS					264.4												287.4
A11-CS								44									44
A12-CS		157															157

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
A1-TL	0	716	88			112	5		170	1			53					
A2-TL	0														33	14	10	4.6
A3-TL	0																	
A4-TL	0																	
A5-TL	0																	
A6-TL	0																	
A7-TL	0																	
A8-TL	0																	
A9-TL	0			573	83			73										
A10-TL	0																1.3	5.3
A11-TL	0																	
A12-TL	0																	
A1-TS	0	1705	220			313	13		450	2			296					
A2-TS	0														227	120	35	19
A3-TS	0																	
A4-TS	0																	
A5-TS	0																	
A6-TS	0																	
A7-TS	0																	
A8-TS	0																	
A10-TS	0																24	36
A11-TS	0																	
A12-TS	0																	
A13-TS	0																	
A1-HTL	0	101	13			21	1		29.4	0.1			5.4					
A2-HTL	0														14	3	2	1
A5-HTL	0																	
A6-HTL	0																	
A7-HTL	0																	
A8-HTL	0																	
A10-HTL	0																1	1
A11-HTL	0																	
A12-HTL	0																	
A1-HTS	0	359	40			194	9		231	1			29.5					
A2-HTS	0														215	86	23	16
A4-HTS	0																	
A5-HTS	0																	
A6-HTS	0																	
A7-HTS	0																	
A8-HTS	0																	
A10-HTS	0																11	17
A11-HTS	0																	
A12-HTS	0																	

	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-B5	Ld-CL	Ld-CS	Ld-TL	-	-	-	TOTAL
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	-	-	-	216
A1-TL																			1145
A2-TL																			61.6
A3-TL	31.5																		31.5
A4-TL	6.3																		6.3
A5-TL		2	3	14															19
A6-TL		1	0.1	0															1.1
A7-TL		2	0	0															2
A8-TL		10	2	2															14
A9-TL																			729
A10-TL					159.4														166
A11-TL								41											41
A12-TL		27																	27
A1-TS																			2999
A2-TS																			401
A3-TS	19																		19
A4-TS	58.8																		58.8
A5-TS		7	10	44															61
A6-TS		35	0.6	0															35.6
A7-TS		40	0	0															40
A8-TS		100	12	18															130
A10-TS					760														820
A11-TS								109											109
A12-TS		145																	145
A13-TS									139										139
A1-HTL																			170.9
A2-HTL																			20
A5-HTL		0.5	0.6	3															4.1
A6-HTL		0.5	0.2	0															0.7
A7-HTL		0.3	0	0															0.3
A8-HTL		1	0.5	0															1.5
A10-HTL					15														17
A11-HTL								15											15
A12-HTL		3.7																	3.7
A1-HTS																			863.5
A2-HTS																			340
A4-HTS	55.1																		55.1
A5-HTS		2	2.5	11															15.5
A6-HTS		20	0.4	0															20.4
A7-HTS		12	0	0															12
A8-HTS		70	6	9															85
A10-HTS					390														418
A11-HTS								36											36
A12-HTS		127																	127

253

253

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
A13-HTS	0																	
A1-LL	0	13	1			5	0.2		6	0			1					
A2-LL	0														4	1	1	0.4
A5-LL	0																	
A6-LL	0																	
A7-LL	0																	
A8-LL	0																	
A10-LL	0																1	0.5
A11-LL	0																	
A12-LL	0																	
A1-LS	0	55.5	8			78	4		93	0.5			7					
A2-LS	0														35	20	8	5
A5-LS	0																	
A6-LS	0																	
A7-LS	0																	
A8-LS	0																	
A10-LS	0																2.9	4.5
A11-LS	0																	
A12-LS	0																	
A1-OL	0	291	35			28	1		110	1			9					
A2-OL	0														40	3.5	2	3.5
A3-OL	0																	
A5-OL	0																	
A6-OL	0																	
A7-OL	0																	
A8-OL	0																	
A9-OL	0			726	106			103										
A10-OL	0																1	2
A11-OL	0																	
A12-OL	0																	
A1-JS	0	177	20			54	2.4		65	0.4			35					
A2-OS	0														97	23	8.7	8.7
A5-OS	0																	
A6-OS	0																	
A7-OS	0																	
A8-OS	0																	
A10-OS	0																3.5	9
A11-OS	0																	
A12-OS	0																	
A14	0			680.6	98			103.4			513.7	25.9						
A15	0																	
C-1	0																	
C-2	0																	

	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-BS	Ld-CL	Ld-CS	— — —	— — RON	TOTAL
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	— — —	— — 215	216
A13-HTS									47.5								47.5
A1-LL																	26.2
A2-LL																	6.4
A5-LL		0.1	0.2	1													1.3
A6-LL		0.2	0.2	0													0.4
A7-LL		0.2	0	0													0.2
A8-LL		0.5	0.5	0													1
A10-LL					4.8												6.3
A11-LL								6									6
A12-LL		1															1
A1-LS																	246
A2-LS																	68
A5-LS		0.7	1	5													6.7
A6-LS		8	0.1	0													8.1
A7-LS		6	0	0													6
A8-LS		35	0.5	1													36.5
A10-LS					71												78.4
A11-LS								84									84
A12-LS		14.3															14.3
A1-OL																	475
A2-OL																	49
A3-OL	22																22
A5-OL		0.7	1	5													6.7
A6-OL		1.3	0.1	0													1.4
A7-OL		1.5	0	0													1.5
A8-OL		1	0.5	5													6.5
A9-OL																	935
A10-OL					226.7												229.7
A11-OL								13									13
A12-OL		9.5															9.5
A1-OS																	353.8
A2-OS																	137.4
A5-OS		4	5	25													34
A6-OS		2	0.25	0													2.25
A7-OS		3	0	0													3
A8-OS		14	1	2													17
A10-OS					129.4												141.9
A11-OS								39.8									39.8
A12-OS		41															41
A14																	1421.6
A15						3315.5	775		779								4869.5
C-1																6195.7	10519.5
C-2																	1269

	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL	A9-BL	A10-BL	A11-BL	A12-BL	A1-BS	A2-BS	A3-BS	A5-BS	A6-BS	A7-BS	A8-BS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A13-HTS																		
A1-LL																		
A2-LL																		
A5-LL																		
A6-LL																		
A7-LL																		
A8-LL																		
A10-LL																		
A11-LL																		
A12-LL																		
A1-LS																		
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A12-LS																		
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A7-OL																		
A8-OL																		
A9-OL																		
A10-OL																		
A11-OL																		
A12-OL																		
A1-OS																		
A2-OS																		
A5-OS																		
A6-OS																		
A7-OS																		
A8-OS																		
A10-OS																		
A11-OS																		
A12-OS																		
A14																		
A15																		
C-1	34							1296				46						
C-2		130							50				280					



	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A13-HTS																		
A1-LL																		
A2-LL																		
A5-LL																		
A6-LL																		
A7-LL																		
A8-LL																		
A10-LL																		
A11-LL																		
A12-LL																		
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A12-LS																		
A1-OL																		
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A6-OL																		
A7-OL																		
A8-OL																		
A9-OL																		
A10-OL																		
A11-OL																		
A12-OL																		
A1-JS																		
A2-OS																		
A5-OS																		
A6-OS																		
A7-OS																		
A8-OS																		
A10-OS																		
A11-OS																		
A12-OS																		
A14																		
A15																		
C-1					12							638				20		
C-2	140					39							20				76	

	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
A13-HTS																		
A1-LL																		
A2-LL																		
A5-LL																		
A6-LL																		
A7-LL																		
A8-LL																		
A10-LL																		
A11-LL																		
A12-LL																		
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A8-OL																		
A9-OL																		
A10-OL																		
A11-OL																		
A12-OL																		
A1-JS																		
A2-OS																		
A5-OS																		
A6-OS																		
A7-OS																		
A8-OS																		
A10-OS																		
A11-OS																		
A12-OS																		
A14																		
A15																		
C-1								16								638		
C-2					48				14								20	

	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
A13-HTS																		
A1-LL																		
A2-LL																		
A5-LL																		
A6-LL																		
A7-LL																		
A8-LL																		
A10-LL																		
A11-LL																		
A12-LL																		
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A7-OL																		
A8-OL																		
A9-OL																		
A10-OL																		
A11-OL																		
A12-OL																		
A1-JS																		
A2-OS																		
A5-OS																		
A6-OS																		
A7-OS																		
A8-OS																		
A10-OS																		
A11-OS																		
A12-OS																		
A14																		
A15																		
C-1		42												2				
C-2			92							136					3			

	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
A13-HTS																		
A1-LL																		
A2-LL																		
A5-LL																		
A6-LL																		
A7-LL																		
A8-LL																		
A10-LL																		
A11-LL																		
A12-LL																		
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A8-OL																		
A9-OL																		
A10-OL																		
A11-OL																		
A12-OL																		
A1-)S																		
A2-OS																		
A5-OS																		
A6-OS																		
A7-OS																		
A8-OS																		
A10-OS																		
A11-OS																		
A12-OS																		
A14																		
A15																		
C-1					8											0.3		
C-2		3				80						50					1	

	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
A13-HTS																		
A1-LL																		
A2-LL																		
A5-LL																		
A6-LL																		
A7-LL																		
A8-LL																		
A10-LL																		
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A12-OL																		
A1-)S																		
A2-OS																		
A5-OS																		
A6-OS																		
A7-OS																		
A8-OS																		
A10-OS																		
A11-OS																		
A12-OS																		
A14																		
A15																		
C-1							1.5									7		
C-2				1				12					11				11	

	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-JS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
A13-HTS																		
A1-LL																		
A2-LL																		
A5-LL																		
A6-LL																		
A7-LL																		
A8-LL																		
A10-LL																		
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A12-LL																		
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A8-OL																		
A9-OL																		
A10-OL																		
A11-OL																		
A12-OL																		
A1-JS																		
A2-OS																		
A5-OS																		
A6-OS																		
A7-OS																		
A8-OS																		
A10-OS																		
A11-OS																		
A12-OS																		
A14																		
A15																		
C-1					808				4									751
C-2						7				25					20			

	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL	A9-BL	A10-BL	A11-BL	A12-BL	A1-BS	A2-BS	A3-BS	A5-BS	A6-BS	A7-BS	A8-BS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
C-3																		
C-4		45	6						10				140	0.6				
C-5	7							158				9						
C-6																		
C-7		16	8						6				31	0.8				
C-8	23											43						
C-9																		
C-10																		
C-11		4	1						2				8	0.1				
C-12	11											31						
C-13																		
C-14																		
C-15																		
C-16																		
C-17	71		0.3	0.2								165		0	0.5			
C-18																		
C-19		101							35				344					
C-20																		
C-21				3											7			
C-22	588		0.6				6.3			9		872		0.2				12
C-23																		
C-24																		
C-25		0.3							0.1				0.3					
C-26																		
C-27		23	2					6.5	57	1			34	0.3				
Ld-BL	1545	1	7	8				0	1									
Ld-BS												2668.6	1	0.8	21			
Ld-CL																		
Ld-CS																		
Ld-TL																		
Ld-TS																		
Ld-HTL																		
Ld-HTS																		
Ld-LL																		
Ld-LS																		
Ld-OL																		
Ld-OS																		
Ld-LSD	0											31.9						
Lb-BL	60.5	59	0.2	3	6	4	1.5	6	40.3	15	75	300.7	300	0.05	26	28	33	35
Lb-BS																		
Lb-CL																		
Lb-CS																		
Lb-TL																		

	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
C-3																		
C-4	33					15	2.2						5				40	0.3
C-5					1							83				5		
C-6																		
C-7	15					5	3						2.5				7	0.2
C-8					9											16		
C-9																		
C-10																		
C-11	4					1	0.5						0.5				3	0.1
C-12					2.5											4		
C-13																		
C-14																		
C-15																		
C-16																		
C-17					21.2		0.1	0.2								40.8		0
C-18																		
C-19	130					39.7							18				147	
C-20																		
C-21								1										
C-22		12			155		0.3				2			6.5		338		0.2
C-23																		
C-24																		
C-25	0.2					0.15							0.05				0.3	
C-26																		
C-27	17	9		0.5		8	0.8					3.5	3.5	1			16	0.1
Ld-BL																		
Ld-BS	1																	
Ld-CL					447.5	0.5	3.4	6					0.1					
Ld-CS																927.9	0.3	0.3
Ld-TL																		
Ld-TS																		
Ld-HTL																		
Ld-HTS																		
Ld-LL																		
Ld-LS																		
Ld-OL																		
Ld-OS																		
Ld-LSD																32.6		
Lb-BL																		
Lb-BS	290.3	70	389	8.1														
Lb-CL					10.7	10.5	0.1	2.8	1.1	4	0.5	1	16.2	20.2	30.6			
Lb-CS																192.3	84.5	0.04
Lb-TL																		



	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
C-3																		
C-4					11				8	2.2							6	
C-5								2								66		
C-6																		
C-7					4.5				1	3							1	
C-8								8										
C-9																		
C-10																		
C-11					1.7				0.4	0.1							0.5	
C-12								6										
C-13																		
C-14																		
C-15																		
C-16																		
C-17	0.2							7		0.1		0.1						
C-18																		
C-19					43				15								17	
C-20																		
C-21	2											1						
C-22				2.5		4		172		0.3					2			5
C-23																		
C-24																		
C-25					0.2				0.2								0.1	
C-26																		
C-27					6	3			4	0.6						3.5	29	2
Ld-BL																		
Ld-BS																		
Ld-CL																		
Ld-CS	8				0.2													
Ld-TL								535.8	0.1	2		3					0.1	0.5
Ld-TS																		
Ld-HTL																		
Ld-HTS																		
Ld-LL																		
Ld-LS																		
Ld-OL																		
Ld-OS																		
Ld-LSD																		
Lb-BL																		
Lb-BS																		
Lb-CL																		
Lb-CS	5	5	17	17	133	27	150											
Lb-TL								95.4	10.3	0.2	3.5	2.5	1	2	3.5	5.3	26.4	15

	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
C-3																		
C-4			40	1						4.4					3			
C-5		6												0.30				
C-6																		
C-7			5	0.8						6					0.3			
C-8		23												1.3				
C-9																		
C-10																		
C-11			2	0.1						3					0.1			
C-12		16											20	0.6				
C-13																		
C-14													2					
C-15																		
C-16																		
C-17		29		0		0.2								2		0		
C-18																		
C-19			102							125					3.4			
C-20																		
C-21						3.5							10			0.2		
C-22		554		0.2					10.2		4.5			39				
C-23																		
C-24																		
C-25			0.4							0.5					0.1			
C-26																		
C-27			35	0.4	0.8					25	6		4.5		1			
Ld-BL																		
Ld-BS																		
Ld-CL																		
Ld-CS																		
Ld-TL																		
Ld-TS		1358.6	1	1.1		10				1								
Ld-HTL														79.8	0.1	0.6		
Ld-HTS																		
Ld-LL																		
Ld-LS																		
Ld-OL																		
Ld-OS																		
Ld-LSD		38.9																
Lb-BL																		
Lb-BS																		
Lb-CL																		
Lb-CS																		
Lb-TL	25																	

	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
C-3																		
C-4		1				11						7					0.1	
C-5					4											0.2		
C-6																		
C-7		0.2				3						3					0.1	
C-8					13											0.4		
C-9																		
C-10																		
C-11		0.1				1						1					0	
C-12					2											0.1		
C-13																		
C-14																		
C-15																		
C-16																		
C-17					28.9			0.1								0.7		0
C-18																		
C-19		2.1				103						58					0.8	
C-20																		
C-21								1							3			0.1
C-22	0.5		2		205						2		1.5			6		
C-23																		
C-24																		
C-25		0				0.3						0.4						
C-26																		
C-27		0.5	0.5			19	0.2					10	0.5		2		0.3	
Ld-BL																		
Ld-BS																		
Ld-CL																		
Ld-CS																		
Ld-TL																		
Ld-TS																		
Ld-HTL		0																
Ld-HTS					351.2	0.2		2.2				0.2						
Ld-LL																12.3	0	0.2
Ld-LS																		
Ld-OL																		
Ld-OS																		
Ld-LSD					23.6													
Lb-BL																		
Lb-BS																		
Lb-CL																		
Lb-CS																		
Lb-TL																		

	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
C-3																		
C-4				0.1				2					2				7	1.3
C-5							2									0.6		
C-6																		
C-7				0.1				0.2					0.2				1	1.5
C-8							6									5		
C-9																		
C-10																		
C-11				0				0.6					0.5				1	0.2
C-12							0.5									1		
C-13																		
C-14																		
C-15																		
C-16																		
C-17							4		0							5.5		0.1
C-18																		
C-19				0.7				16					13				8	
C-20																		
C-21									0.4									
C-22			0.1				65					1.5				79		0.2
C-23																		
C-24																		
C-25				0				0.3					0.2				0.1	
C-26																		
C-27				0.2	0.4			9					2	2			3	0.5
Ld-BL																		
Ld-BS																		
Ld-CL																		
Ld-CS																		
Ld-TL																		
Ld-TS																		
Ld-HTL																		
Ld-HTS																		
Ld-LL				0														
Ld-LS							77.4	0.1	1				0.1					
Ld-OL																222.6	1	1.2
Ld-OS																		
Ld-LSD							2.3											
Lb-BL																		
Lb-BS																		
Lb-CL																		
Lb-CS																		
Lb-TL																		

	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-OS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
C-3																		
C-4						1				15					7			
C-5					94				1									94
C-6																		
C-7						1				1.5					2			
C-8									2.5									488
C-9																		
C-10																		
C-11						0.3				1					1			
C-12									1.2									
C-13																		
C-14																		
C-15																		
C-16																		
C-17	0.1								16.3		0.1							
C-18																		
C-19						5				29					21			
C-20																		
C-21	0.5										2.8							
C-22				2.5			1		61					1		2.5		21.3
C-23																		
C-24																		
C-25						0.1				0.2					0.1			
C-26																		
C-27					4.1	41	0.3			6					3	2		
Ld-BL																		
Ld-BS																		
Ld-CL																		
Ld-CS																		
Ld-TL																		
Ld-TS																		
Ld-HTL																		
Ld-HTS																		
Ld-LL																		
Ld-LS																		
Ld-OL	1					0.1												
Ld-OS									162.3	1	5				0.1			
Ld-LSD									2.6									
Lb-BL																		0
Lb-BS																		0.5
Lb-CL																		0
Lb-CS																		0.4
Lb-TL																		0

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
C-3	20.2																	
C-4	0																	
C-5	0																	
C-6	0																	
C-7	0																	
C-8	0																	
C-9	0																	
C-10	8.1																	
C-11	0																	
C-12	0																	
C-13	0																	
C-14	26.2																	
C-15	70.9																	
C-16	0																	
C-17	0																	
C-18	13.5																	
C-19	276.2																	
C-20	0																	
C-21	52.4																	
C-22	11.5																	
C-23	0																	
C-24	0																	
C-25	5																	
C-26	29.1																	
C-27	0																	
Ld-BL	0																	
Ld-BS																		
Ld-CL																		
Ld-CS																		
Ld-TL																		
Ld-TS																		
Ld-HTL																		
Ld-HTS																		
Ld-LL																		
Ld-LS																		
Ld-OL																		
Ld-OS																		
Ld-LSD																		
Lb-BL	1.1																	
Lb-BS	7.8																	
Lb-CL	1.4																	
Lb-CS	5.6																	
Lb-TL	1.8																	

	K-BL	K-BS	K-CL	K-CS	K-TL	K-TS	K-HTL	K-HTS	K-LL	K-LS	K-OL	K-OS	B-L	B-S	C-L	C-S	T-L	T-S
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198
C-3													148	695	50	378	97	1336
C-4																		
C-5													2.2	32	1	17	1	28
C-6													21	38	2.4	13	5	13
C-7													23	119	7	53	7	
C-8																		
C-9													3	4	1	2	1	2
C-10													51	167	17	78	34	115
C-11																		
C-12													199	596	67	298	42	342
C-13																		
C-14													300	1045	80	230	22	148
C-15													65.6	130	32	70	40	85
C-16																		
C-17													0	0	0	0	2.7	24
C-18													24	43	12	25	50	155
C-19																		
C-20													58	145	19	58	20	109
C-21																		
C-22													50	67	14	19	17	40
C-23													490	784	180	385	154	684
C-24													169.5	199	59.7	89.5	44.8	99.5
C-25													120	216.9	61.3	162.2	36.2	234.6
C-26													3.5	12	17	7	9	33
C-27													50	117.5	38.4	29	12	45
Ld-BL																		
Ld-BS																		
Ld-CL																		
Ld-CS																		
Ld-TL																		
Ld-TS																		
Ld-HTL																		
Ld-HTS																		
Ld-LL																		
Ld-LS																		
Ld-OL																		
Ld-OS																		
Ld-LSD																		
Lb-BL													2					
Lb-BS														9				
Lb-CL															0.5			
Lb-CS																3		
Lb-TL																	1.5	

	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	COM	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9	RON	TOTAL
	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216
C-3	9	388	3	187	21	131											630	4093.2
C-4																	116.8	544
C-5	0.2	22	0.2	3	0.4	3.5											1897	2540.6
C-6	1	9	0.2	4	1	2.4												110
C-7	0.8	78	0.5	40	2.3	9.2											83.5	553.2
C-8																	2455.2	3093.4
C-9	0.1	1	0	0.5	1	0.4												16
C-10	1	82	0.3	12	1	15.4												581.8
C-11																		38.8
C-12	13	212	2.5	90	40	85												2082.4
C-13																	2	2
C-14	14	190	4	28	38	65											787.8	2980
C-15	7	48	0.6	15	16	25												605.1
C-16															85.4		200	285.4
C-17	0	0	0	0	0	0											2.1	422.5
C-18	2	40	0.4	11	4.5	10											0	390.4
C-19															47		60.3	1760.2
C-20	4	39	1.5	13	8	32												506.5
C-21																	320	407.9
C-22	3	10	0.2	1.5	7.5	1	43.2								3			3535.8
C-23	32	250	8.5	110	88	150												3315.5
C-24	8.9	39.8	0.1	15	9.7	39.5												775
C-25	9.2	76.1	1.8	46.7	36.8	65.3	16										174.1	1266.8
C-26	2.5	22.5	3.1	7.8	3.7	7	34										73.3	264.5
C-27	4.5	20.2	0.8	10.5	25	15.6												779
Ld-BL																		1562
Ld-BS																		2692.4
Ld-CL																		457.5
Ld-CS																		936.7
Ld-TL																		541.5
Ld-TS																		1371.7
Ld-HTL																		80.5
Ld-HTS																		353.8
Ld-LL																		12.5
Ld-LS																		78.6
Ld-OL																		225.9
Ld-OS																		168.4
Ld-LSD																		131.9
Lb-BL							53.4								0		34	361
Lb-BS							120.6								0		99.8	1717.85
Lb-CL							30.7								0		18	148.3
Lb-CS							83.6								0		44	767.44
Lb-TL							18.8								0		8	220.2





	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Lb-TS																		
Lb-HTL																		
Lb-HTS																		
Lb-LL																		
Lb-LS																		
Lb-OL																		
Lb-OS																		
Lb-HRD	115.9	0	5	13.9	123.3	16	0.4	6.7	0.9	4	5.5	2.5	31.2	2.8	12	228.7	5	0.06
K-BL																		
K-BS	33.4	20	0	6.7														
K-CL					137.2	14.55	25.2	13.3	0.1	0	9.7	10.9	5.25	61.5	0			
K-CS																160.7	53.8	2.5
K-TL																		
K-TS																		
K-HTL																		
K-HTS																		
K-LL																		
K-LS																		
K-OL																		
K-OS																		
B-L																		
B-S																		
C-L																		
C-S																		
T-L																		
T-S																		
HT-L																		
HT-S																		
Lo-L																		
Lo-S																		
O-L																		
O-S																		
COM																		
FA1																		
FA2																		
FA3																		
FA4																		
FA5																		
FA6	0																	0
FA7																		
FA8																		
FA9																		
RON	1.2			12.2	52	0.6	3	9	0.1		0.3	8.1				89	2.1	0.2
Total	781	111	394	41.4	971.4	150	39	39	2.2	8	18	747	102.3	92	42.6	2055	435	4

	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Lb-TS																		
Lb-HTL																		
Lb-HTS																		
Lb-LL																		
Lb-LS																		
Lb-OL																		
Lb-OS																		
Lb-HRD	8	2	3	8	22.2	1	7	204	1.7	0.8	0	2.5	0	0	2.1	0.4	44.2	1
K-BL																		
K-BS																		
K-CL																		
K-CS	16.8	0.1	0	23.9	16.3	9	0											
K-TL								57.8	6.7	20.8	2.8	5.9	0	0	6.1	4.8	13.12	17.5
K-TS																		
K-HTL																		
K-HTS																		
K-LL																		
K-LS																		
K-OL																		
K-OS																		
B-L																		
B-S																		
C-L																		
C-S																		
T-L																		
T-S																		
HT-L																		
HT-S																		
Lo-L																		
Lo-S																		
O-L																		
O-S																		
COM																		
FA1																		
FA2																		
FA3																		
FA4																		
FA5																		
FA6	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0
FA7																		
FA8																		
FA9																		
RON	11	0.2		0.6	1.3			41	0.2	1.4		4	0.1		0.3	11	8.58	
Total	51	7.3	20	52	287.4	44	157	1145	61.6	31.5	6.3	19	1.1	2	14	729	166	41

	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Lb-TS		451.9	80	0.4	32.2	10	35.2	40	74	350.8	72	145	25					
Lb-HTL														2.6	2	0.1	0.4	0.3
Lb-HTS																		
Lb-LL																		
Lb-LS																		
Lb-OL																		
Lb-OS																		
Lb-HRD	2	140.1	16	0	0	5.5	0	0	0	58.7	1	0	2	25.4	0.5	0.9	0.2	0
K-BL																		
K-BS																		
K-CL																		
K-CS																		
K-TL	0																	
K-TS		223.5	25.2	14.2	25.8	19.8	0.2	0	44.3	106.6	25.5	0	29.5					
K-HTL														10.9	6.3	1.5	0.1	0
K-HTS																		
K-LL																		
K-LS																		
K-OL																		
K-OS																		
B-L																		
B-S																		
C-L																		
C-S																		
T-L																		
T-S																		
HT-L																		
HT-S																		
Lo-L																		
Lo-S																		
O-L																		
O-S																		
COM																		
FA1																		
FA2														0				
FA3																		
FA4																		
FA5																		
FA6	0			0	0	0	0	0	0		0	0	0	0	0	0	0	0
FA7																		
FA8																		
FA9																		
RON		116	2.4	0.8		12	0.2		1.5	3			46	7	0.2	0.8		
Total	27	2999	401	19	58.8	61	35.6	40	130	820	109	145	139	170.9	20	4.1	0.7	0.3

	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Lb-TS																		
Lb-HTL	0.2	2.9	5	3.7														
Lb-HTS					171.5	91.7	24.2	2.5	19.2	11	43	226.5	10	125	13.8			
Lb-LL																1	0.8	0.1
Lb-LS																		
Lb-OL																		
Lb-OS																		
Lb-HRD	0.7	5.5	0.4	0	17.5	1.3	0	1.5	1	1	3	22	0.5	2	1	3.9	0.2	0.3
K-BL																		
K-BS																		
K-CL																		
K-CS																		
K-TL																		
K-TS																		
K-HTL	0	1.6	7.1	0														
K-HTS					15.8	28.3	30.7	5.2	0.05	0	36.2	37.4	23.5	0	27.7			
K-LL																0.7	3	0.4
K-LS																		
K-OL																		
K-OS																		
B-L																		
B-S																		
C-L																		
C-S																		
T-L																		
T-S																		
HT-L																		
HT-S																		
Lo-L																		
Lo-S																		
O-L																		
O-S																		
COM																		
FA1																		
FA2																0		
FA3																		
FA4																		
FA5																		
FA6	0	0	0	0										0	0	0	0	0
FA7																		
FA8																		
FA9																		
RON	0.1	0.1			23	1.2		3	0.15		0.8	2.5				0.6	0.1	0.2
Total	1.5	17	15	3.7	863.5	340	55.1	15.5	20.4	12	85	418	36	127	47.5	26.2	6.4	1.3

	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Lb-TS																		
Lb-HTL																		
Lb-HTS																		
Lb-LL	0.1	0.1	0.1	1.3	1	0.4												
Lb-LS							66.6	12.8	1.8	8	6	23	38	48.3	14.3			
Lb-OL																1.4	5	0.1
Lb-OS																		
Lb-HRD	0.1	0.1	0.4	1.9	2	0.6	10.3	1.2	0.2	0	0	0	4.5	0	0	83.4	3	0.7
K-BL																		
K-BS																		
K-CL																		
K-CS																		
K-TL																		
K-TS																		
K-HTL																		
K-HTS																		
K-LL	0.19	0	0.4	0.8	2.6	0												
K-LS							0.4	12.1	2	0	0	11.4	6.5	25.7	0			
K-OL																53.5	8.6	14.8
K-OS																		
B-L																		
B-S																		
C-L																		
C-S																		
T-L																		
T-S																		
HT-L																		
HT-S																		
Lo-L																		
Lo-S																		
O-L																		
O-S																		
COM																		
FA1																		
FA2																0		
FA3																		
FA4																		
FA5																		
FA6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FA7																		
FA8																		
FA9																		
RON	0.01			0.2			10	1.7	1.3	0.1		0.6	0.4	8		16	0.3	1.4
Total	0.4	0.2	1	6.3	6	1	246	68	6.7	8.1	6	36.5	78.4	84	14.3	475	49	22

	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-JS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Lb-TS																		0.8
Lb-HTL																		0
Lb-HTS																		0.3
Lb-LL																		0
Lb-LS																		0.1
Lb-OL	0.1	0.1	0.3	0.1	0.8	4.8	3	3										0
Lb-OS									44.8	18	4	1.8	2	8	25.7	9.5	40	0.08
Lb-HRD	1.9	1.2	1.2	0.9	2.9	36	1	6.5	29.2	2.2	4.5	0.3	1	2	38.5	0.5	1	1.12
K-BL																		0
K-BS																		
K-CL																		
K-CS																		
K-TL																		
K-TS																		
K-HTL																		
K-HTS																		
K-LL																		
K-LS																		
K-OL	1.8	0.1	0	2.9	14.7	106.17	7.7	0										
K-OS									13.4	36.5	11.6	0.1	0	5.8	23.1	25.3	0	
B-L																		
B-S																		
C-L																		
C-S																		
T-L																		
T-S																		
HT-L																		
HT-S																		
Lo-L																		
Lo-S																		
O-L																		
O-S																		
COM																		
FA1																		
FA2																		
FA3																		
FA4																		
FA5																		
FA6	0	0	0	0	0	0	0	0			0	0	0	0	0	0	0	0
FA7																		
FA8																		
FA9																		
RON	1.3	0		0.1	10.5	27.23			15.5	2	6	0.05		0.2	0.4			64
Total	6.7	1.4	1.5	6.5	935	229.7	13	9.5	353.8	137.4	34	2.25	3	17	141.9	39.8	41	1421 6

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
Lb-TS	14																	
Lb-HTL	0.1																	
Lb-HTS	5.7																	
Lb-LL	0																	
Lb-LS	2.5																	
Lb-OL	0.5																	
Lb-OS	1.5																	
Lb-HRD	130.9																	
K-BL	0																	
K-BS																		
K-CL																		
K-CS																		
K-TL																		
K-TS																		
K-HTL																		
K-HTS																		
K-LL																		
K-LS																		
K-OL																		
K-OS																		
B-L	0																	
B-S	0																	
C-L	0																	
C-S	0																	
T-L	0																	
T-S	0																	
HT-L	0																	
HT-S	0																	
Lo-L	0																	
Lo-S	0																	
O-L	0																	
O-S	0																	
COM	0																	
FA1	0																	
FA2	0																	
FA3	0																	
FA4	0																	
FA5	0																	
FA6	0																	
FA7	0																	
FA8	0																	
FA9	0																	
RON	4183.5	701	46	376.6	5	75.6		9.1		68.1	12.9	743.5				100.6		0.5
Total	4869.5	10519.5	1269	4093.2	544	2540.6	110	553.2	3093.4	16	581.8	38.8	2082.4	2	2980	605.1	285.4	422.5



	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-BS	Ld-CL	Ld-CS	Ld-TL	Ld-TS	Ld-HTL	Ld-HTS
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
Lb-TS																		
Lb-HTL																		
Lb-HTS																		
Lb-LL																		
Lb-LS																		
Lb-OL																		
Lb-OS																		
Lb-HRD																		
K-BL																		
K-BS																		
K-CL																		
K-CS																		
K-TL																		
K-TS																		
K-HTL																		
K-HTS																		
K-LL																		
K-LS																		
K-OL																		
K-OS																		
B-L											1562							
B-S												2692.4						
C-L													457.5					
C-S														936.7				
T-L															541.5			
T-S																1371.7		
HT-L																	80.5	
HT-S																		353.8
Lo-L																		
Lo-S																		
O-L																		
O-S																		
COM																		
FA1																		
FA2																		
FA3																		
FA4																		
FA5																		
FA6																		
FA7																		
FA8																		
FA9																		
RON	38.7		398.05	30.9	297.2	0		621	36.6									
Total	390.4	1760.2	506.5	407.9	3535.8	3315.5	775	1266.8	264.5	779	1562	2692.4	457.5	936.7	541.5	1371.7	80.5	353.8

	Ld-LL	Ld-LS	Ld-OL	Ld-OS	Ld-LSD	Lb-BL	Lb-BS	Lb-CL	Lb-CS	Lb-TL	Lb-TS	Lb-HTL	Lb-HTS	Lb-LL	Lb-LS	Lb-OL	Lb-OS	Lb-HRD
	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
Lb-TS																		
Lb-HTL																		
Lb-HTS																		
Lb-LL																		
Lb-LS																		
Lb-OL																		
Lb-OS																		
Lb-HRD																		
K-BL																		
K-BS																		
K-CL																		
K-CS																		
K-TL																		
K-TS																		
K-HTL																		
K-HTS																		
K-LL																		
K-LS																		
K-OL																		
K-OS																		
B-L					4.9	361												0
B-S					9.4		1717.85											343.15
C-L					73.8			148.3										0
C-S					4.9				767.44									280.56
T-L					0					220.2								0
T-S					4.9						1460.6							784.4
HT-L					0							24.3						0
HT-S					0								858.7					368.3
Lo-L	12.5				0									6.6				0
Lo-S		78.6			0										268.3			311.7
O-L			225.9		24.1											56.3		0
O-S				168.4	0												174.98	210.02
COM					9.9	0												
FA1																		
FA2																		
FA3																		
FA4																		
FA5																		
FA6																		
FA7																		
FA8																		
FA9																		
RON						0												613.3
Total	12.5	78.6	225.9	168.4	131.9	361	1717.85	148.3	767.44	220.2	1460.6	24.3	858.7	6.6	268.3	56.3	174.98	2911.43

	K-BL	K-BS	K-CL	K-CS	K-TL	K-TS	K-HTL	K-HTS	K-LL	K-LS	K-OL	K-OS	B-L	B-S	C-L	C-S	T-L	T-S
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198
Lb-TS																		6
Lb-HTL																		
Lb-HTS																		
Lb-LL																		
Lb-LS																		
Lb-OL																		
Lb-OS																		
Lb-HRD													5	3	1.5	1	0.5	0
K-BL																		
K-BS																		
K-CL																		
K-CS																		
K-TL																		
K-TS																		
K-HTL																		
K-HTS																		
K-LL																		
K-LS																		
K-OL																		
K-OS																		
B-L	710.68																	
B-S		1117.8																
C-L			281.4															
C-S				285.1														
T-L					135.52													
T-S						514.6												
HT-L							27.5											
HT-S								204.85										
Lo-L									8.09									
Lo-S										58.1								
O-L											214.57							
O-S												116.3						
COM													107.5	175.2	44.8	83	46.8	124.6
FA1																		
FA2																		
FA3													150	200	50	38	28	29
FA4													256.4	497.1	133	159	61	98
FA5													66.7	105.8	25.6	35.1	15.1	45.6
FA6													86.3	153.1	13.7	29.3	5.6	29.5
FA7																		
FA8													383.38	637.2	135.6	220.9	223.92	474.3
FA9																		
RON													15	24.83	12	3	7	12
Total	710.68	1117.8	281.4	285.1	135.52	514.6	27.5	204.85	8.09	58.1	214.57	116.3	2850.58	6216.03	1075.7	2486.2	984.22	4312.3

	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	COM	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9	RON	TOTAL
	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216
Lb-TS							100.9								0		22.4	1460.6
Lb-HTL	0.4						0.1								0		6.5	24.3
Lb-HTS		2.5					85.5								0		26.3	858.7
Lb-LL			0.2				1.5								0		0	6.6
Lb-LS				1.5			45.4								0		0	268.3
Lb-OL					0.4		34.2								0		2.5	56.3
Lb-OS						1	15.6								0		3	174.98
Lb-HRD	0.1	0	0	0	0.8	1	0								25		0	2911.43
K-BL												10						710.68
K-BS												8						1117.8
K-CL												3.7						281.4
K-CS												2						285.1
K-TL												0						135.52
K-TS												0						514.6
K-HTL												0						27.5
K-HTS												0						204.85
K-LL												0						8.09
K-LS												0						58.1
K-OL												4.3						214.57
K-OS												0.5						116.3
B-L							0.4	30	75			70.2					36.4	2850.58
B-S							1.33	118	110			81					25.1	6216.03
C-L							0.1	19	60			19.2					16.4	1075.7
C-S							0.7	100	85			12.1					13.7	2486.2
T-L							0.1	22	45			9.4					10.5	984.22
T-S							0.7	115	44			12.1					4.3	4312.3
HT-L							0.05	6	10			10.8					31.4	190.55
HT-S							0.4	61	30			6.7					13.9	1897.65
Lo-L							0.02	4	3			0.1						34.31
Lo-S		0.1			0.1	0.1	0.18	39	9			0.5						767.28
O-L							0.02	6	10			20.2					14.2	571.29
O-S							0.1	80	50			10.8					10.7	821.3
COM	9.35	53.95	1.26	19.39	20.55	19.35											612.95	1328.6
FA1														1345			0	1345
FA2																	1530	1530
FA3	20	18	0	1	45	25											0	604
FA4	36	63	1.6	76	45	64.5												1490.6
FA5	5.4	23.5	1.1	12.1	6.7	20.2												362.9
FA6	1.7	10.7	0.2	12.6	2.1	7.9			0									352.7
FA7										604							0	604
FA8	4.4	190.3	2	47.69	131.74	23.1		745	999					-741			-531	2946.53
FA9							128											128
RON	1	8	0.25	2	15	1.85	513				1490.6	81.3	352.7		2466.13	128		14730.85
Total	190.55	1897.65	34.31	767.28	571.29	821.3	1328.6	1345	1530	604	1490.6	362.9	352.7	604	2946.53	128	14730.85	150810.1

APPENDIX D-2

INTERDEPENDENCE COEFFICIENTS OF THE SOCIAL  
ACCOUNTING MATRIX, KUMROJ  
PANCHAYAT NEPAL,  
1988

	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL	A9-BL	A10-BL	A11-BL	A12-BL	A1-BS	A2-BS	A3-BS	A5-BS	A6-BS	A7-BS	A8-BS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A1-BL	1.083752	0.150500	0.093269	0.062262	0.079008	0.083224	0.086906	0.261130	0.096115	0.080125	0.078237	0.101051	0.142835	0.114249	0.078158	0.098713	0.099847	0.101197
A2-BL	0.027750	1.027597	0.026944	0.022373	0.026387	0.025262	0.025811	0.026930	0.022659	0.027544	0.027275	0.036330	0.034462	0.035433	0.031000	0.039133	0.039806	0.037704
A3-BL	0.006218	0.006914	1.005704	0.005214	0.006700	0.007155	0.006902	0.007290	0.005857	0.006314	0.006590	0.006311	0.006911	0.005932	0.005006	0.006230	0.006264	0.006414
A5-BL	0.003231	0.004008	0.003278	1.008258	0.003254	0.003117	0.003276	0.003097	0.003152	0.003486	0.003363	0.003295	0.004120	0.003302	0.007997	0.003573	0.003535	0.003535
A6-BL	0.000630	0.001684	0.000521	0.000416	1.000497	0.000480	0.000639	0.000603	0.000930	0.000638	0.000511	0.000710	0.001734	0.000616	0.000503	0.000633	0.000643	0.000699
A7-BL	0.000617	0.001670	0.000508	0.000404	0.000482	1.000466	0.000625	0.000590	0.000919	0.000623	0.000497	0.000695	0.001718	0.000600	0.000490	0.000616	0.000626	0.000682
A8-BL	0.001875	0.004014	0.001678	0.002411	0.001632	0.001574	1.001904	0.001800	0.002418	0.001942	0.001681	0.002048	0.004139	0.001872	0.002536	0.001956	0.001984	0.002079
A9-BL	0.072699	0.116299	0.104163	0.059067	0.077027	0.084344	0.081962	1.084582	0.078093	0.071819	0.074826	0.090549	0.123303	0.126094	0.074325	0.093715	0.094589	0.094806
A10-BL	0.034797	0.021244	0.015329	0.010529	0.012700	0.012918	0.038510	0.033033	1.014220	0.032601	0.012784	0.035547	0.020317	0.018707	0.012162	0.014966	0.015148	0.028523
A11-BL	0.003181	0.003356	0.003138	0.002733	0.003389	0.003407	0.003356	0.003222	0.002835	1.003357	0.003430	0.003211	0.003426	0.003153	0.002705	0.003401	0.003435	0.003404
A12-BL	0.006784	0.018370	0.005588	0.004443	0.005304	0.005122	0.006875	0.006486	0.010104	0.006857	1.005463	0.007645	0.018897	0.006605	0.005385	0.006780	0.006884	0.007502
A1-BS	0.136219	0.239677	0.150705	0.101891	0.129185	0.135844	0.141375	0.412294	0.154488	0.130748	0.128032	1.164372	0.229073	0.184759	0.127776	0.161424	0.163291	0.165108
A2-BS	0.093870	0.094711	0.092855	0.077081	0.091333	0.087319	0.089211	0.091033	0.078101	0.095394	0.094462	0.122562	1.118726	0.122451	0.106960	0.135554	0.137892	0.130533
A3-BS	0.000651	0.000724	0.000598	0.000546	0.000702	0.000750	0.000723	0.000764	0.000614	0.000661	0.000690	0.000661	0.000724	1.000621	0.000524	0.000653	0.000656	0.000672
A5-BS	0.008045	0.009987	0.008161	0.020543	0.008104	0.007762	0.008157	0.007714	0.007851	0.008680	0.008375	0.008208	0.010266	0.008224	1.019895	0.008780	0.008899	0.008805
A6-BS	0.001891	0.005053	0.001564	0.001247	0.001490	0.001440	0.001917	0.001810	0.002791	0.001913	0.001533	0.002131	0.005202	0.001848	0.001509	1.001900	0.001929	0.002096
A7-BS	0.002159	0.005845	0.001778	0.001414	0.001688	0.001630	0.002187	0.002064	0.003215	0.002182	0.001738	0.002433	0.006013	0.002102	0.001713	0.002157	1.002190	0.002387
A8-BS	0.006692	0.015259	0.005876	0.007740	0.005676	0.005474	0.006788	0.006413	0.008960	0.006892	0.005749	0.007355	0.015713	0.006631	0.008284	0.006894	0.006996	1.007403
A10-BS	0.060292	0.036896	0.026776	0.018568	0.022151	0.022542	0.065349	0.057314	0.024736	0.055431	0.022293	0.062201	0.035301	0.032391	0.021392	0.026062	0.026377	0.048745
A11-BS	0.006420	0.006772	0.006333	0.005515	0.006841	0.006876	0.006772	0.006503	0.005721	0.006774	0.006923	0.006480	0.006915	0.006364	0.005459	0.006863	0.006933	0.006869
A12-BS	0.024301	0.065798	0.020015	0.015914	0.018998	0.018345	0.024623	0.023232	0.036189	0.024562	0.019566	0.027384	0.067687	0.023658	0.019288	0.024285	0.024657	0.026871
A13-BS	0.001586	0.001798	0.001465	0.001328	0.001700	0.001816	0.001759	0.001862	0.001587	0.001622	0.001672	0.001693	0.001840	0.001619	0.001357	0.001690	0.001701	0.001729
A1-CL	0.022518	0.043765	0.025739	0.016362	0.020837	0.022108	0.023385	0.078682	0.027045	0.021291	0.020562	0.027177	0.040530	0.031452	0.020635	0.026033	0.026324	0.026929
A2-CL	0.008005	0.007910	0.007725	0.006409	0.007536	0.007206	0.007370	0.007756	0.006465	0.007874	0.007794	0.010628	0.009987	0.010308	0.009035	0.011398	0.011597	0.010966
A3-CL	0.002309	0.002568	0.002119	0.001936	0.002489	0.002658	0.002564	0.002708	0.002175	0.002345	0.002448	0.002344	0.002567	0.002203	0.001859	0.002314	0.002327	0.002382
A5-CL	0.002470	0.003106	0.002500	0.006265	0.002481	0.002376	0.002504	0.002367	0.002424	0.002663	0.002564	0.002522	0.003192	0.002522	0.006070	0.002691	0.002728	0.002702
A6-CL	0.000136	0.000358	0.000113	0.000091	0.000108	0.000105	0.000138	0.000131	0.000199	0.000138	0.000112	0.000154	0.000369	0.000134	0.000109	0.000139	0.000140	0.000152
A7-CL	0.000493	0.001336	0.000406	0.000323	0.000386	0.000372	0.000500	0.000472	0.000735	0.000499	0.000397	0.000556	0.001374	0.000480	0.000392	0.000493	0.000501	0.000546
A8-CL	0.001126	0.002410	0.001007	0.001417	0.000981	0.000947	0.001144	0.001082	0.001451	0.001166	0.001010	0.001232	0.002486	0.001126	0.001496	0.001177	0.001194	0.001251
A9-CL	0.036064	0.057814	0.052252	0.029294	0.038194	0.041811	0.040648	0.041931	0.038807	0.035631	0.037108	0.044941	0.061206	0.063130	0.036895	0.046523	0.046959	0.047062
A10-CL	0.007958	0.004861	0.003523	0.002442	0.002910	0.002963	0.008606	0.007566	0.003256	0.007296	0.002928	0.008220	0.004650	0.004264	0.002816	0.003426	0.003468	0.006417
A11-CL	0.005321	0.005613	0.005249	0.004571	0.005670	0.005699	0.005613	0.005390	0.004742	0.005615	0.005738	0.005370	0.005731	0.005275	0.004525	0.005689	0.005747	0.005694
A12-CL	0.002627	0.007114	0.002164	0.001721	0.002054	0.001983	0.002662	0.002512	0.003913	0.002656	0.002116	0.002961	0.007318	0.002558	0.002085	0.002626	0.002666	0.002905
A1-CS	0.051067	0.092152	0.056804	0.037922	0.048109	0.050660	0.052968	0.158622	0.058755	0.048849	0.047647	0.061589	0.087283	0.069557	0.047591	0.060106	0.060798	0.061646
A2-CS	0.023056	0.023338	0.022869	0.018998	0.022556	0.021593	0.022041	0.022390	0.019314	0.023537	0.023316	0.029610	0.028859	0.029611	0.025824	0.032720	0.033276	0.031564
A3-CS	0.000237	0.000263	0.000217	0.000199	0.000255	0.000273	0.000263	0.000278	0.000223	0.000241	0.000251	0.000240	0.000263	0.000226	0.000191	0.000237	0.000239	0.000244
A5-CS	0.003231	0.004008	0.003278	0.008258	0.003254	0.003117	0.003276	0.003097	0.003152	0.003486	0.003363	0.003295	0.004120	0.003302	0.007997	0.003525	0.003573	0.003535
A6-CS	0.000452	0.001190	0.000376	0.000300	0.000359	0.000347	0.000459	0.000433	0.000661	0.000458	0.000369	0.000509	0.001227	0.000444	0.000363	0.000457	0.000464	0.000502
A7-CS	0.001234	0.003340	0.001016	0.000808	0.000964	0.000931	0.001250	0.001179	0.001837	0.001247	0.000993	0.001390	0.003436	0.001201	0.000979	0.001233	0.001252	0.001364
A8-CS	0.003244	0.007497	0.002829	0.003335	0.002740	0.002649	0.003295	0.003116	0.004375	0.003332	0.002820	0.003590	0.007735	0.003228	0.003649	0.003358	0.003407	0.003610
A10-CS	0.022288	0.013634	0.009875	0.006821	0.008179	0.008320	0.024394	0.021174	0.009138	0.020678	0.008233	0.022887	0.013044	0.011989	0.007865	0.009627	0.009744	0.018143
A11-CS	0.002545	0.002684	0.002510	0.002186	0.002712	0.002726	0.002685	0.002578	0.002268	0.002685	0.002744	0.002568	0.002741	0.002523	0.002164	0.002721	0.002748	0.002723
A12-CS	0.009683	0.026219	0.007976	0.006341	0.007570	0.007310	0.009812	0.009257	0.014421	0.009787	0.007797	0.010912	0.026972	0.009427	0.007686	0.009677	0.009825	0.010708

	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL	A9-BL	A10-BL	A11-BL	A12-BL	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A1-TL	0.027837	0.052945	0.031456	0.020439	0.025981	0.027471	0.028966	0.093514	0.033060	0.026519	0.025682	0.033580	0.049356	0.038485	0.025730	0.032475	0.032843	0.033492
A2-TL	0.003205	0.003206	0.003119	0.002597	0.003081	0.002966	0.003020	0.003127	0.002663	0.003204	0.003178	0.003938	0.003785	0.003805	0.003310	0.004165	0.004232	0.004044
A3-TL	0.001865	0.002074	0.001711	0.001564	0.002010	0.002147	0.002071	0.002187	0.001757	0.001894	0.001977	0.001893	0.002073	0.001780	0.001502	0.001869	0.001879	0.001924
A4-TL	0.000373	0.000415	0.000342	0.000313	0.000402	0.000429	0.000414	0.000437	0.000351	0.000379	0.000395	0.000379	0.000415	0.000356	0.000300	0.000374	0.000376	0.000385
A5-TL	0.001204	0.001469	0.001225	0.003112	0.001216	0.001165	0.001221	0.001154	0.001166	0.001300	0.001257	0.001226	0.001510	0.001231	0.003011	0.001315	0.001333	0.001317
A6-TL	0.000068	0.000174	0.000058	0.000046	0.000055	0.000054	0.000070	0.000066	0.000098	0.000069	0.000057	0.000077	0.000180	0.000068	0.000056	0.000070	0.000071	0.000077
A7-TL	0.000123	0.000334	0.000102	0.000081	0.000096	0.000093	0.000125	0.000118	0.000184	0.000125	0.000099	0.000139	0.000344	0.000120	0.000098	0.000123	0.000125	0.000136
A8-TL	0.000877	0.001944	0.000774	0.000928	0.000755	0.000731	0.000893	0.000845	0.001153	0.000904	0.000776	0.000970	0.002010	0.000881	0.001011	0.000920	0.000933	0.000982
A9-TL	0.035130	0.055839	0.048962	0.028562	0.037265	0.040833	0.039633	0.040941	0.037565	0.034694	0.036187	0.043705	0.059419	0.059569	0.035863	0.045211	0.045629	0.045741
A10-TL	0.013053	0.007970	0.005746	0.003938	0.004765	0.004845	0.014531	0.012386	0.005335	0.012298	0.004797	0.013295	0.007622	0.007026	0.004550	0.005615	0.005684	0.010746
A11-TL	0.002371	0.002501	0.002339	0.002037	0.002527	0.002540	0.002502	0.002402	0.002113	0.002502	0.002557	0.002393	0.002554	0.002351	0.002016	0.002535	0.002561	0.002537
A12-TL	0.001665	0.004509	0.001372	0.001091	0.001302	0.001257	0.001687	0.001592	0.002480	0.001683	0.001341	0.001877	0.004638	0.001621	0.001322	0.001664	0.001690	0.001841
A1-TS	0.079196	0.141882	0.087241	0.059123	0.074918	0.078733	0.082291	0.238128	0.090898	0.076122	0.074270	0.095565	0.134658	0.107017	0.074173	0.093698	0.094785	0.095989
A2-TS	0.022088	0.022572	0.022024	0.018355	0.021932	0.021113	0.021476	0.021588	0.018908	0.022795	0.022618	0.026849	0.026647	0.026828	0.023264	0.029432	0.029902	0.028578
A3-TS	0.001125	0.001251	0.001032	0.000943	0.001212	0.001295	0.001249	0.001319	0.001060	0.001143	0.001193	0.001142	0.001250	0.001073	0.000906	0.001127	0.001133	0.001161
A4-TS	0.003482	0.003872	0.003194	0.002920	0.003752	0.004007	0.003865	0.004082	0.003280	0.003536	0.003691	0.003534	0.003870	0.003322	0.002803	0.003489	0.003508	0.003592
A5-TS	0.003866	0.004778	0.003924	0.009843	0.003898	0.003735	0.003921	0.003709	0.003765	0.004172	0.004028	0.003947	0.004915	0.003956	0.009536	0.004225	0.004283	0.004235
A6-TS	0.002199	0.005888	0.001818	0.001449	0.001731	0.001673	0.002230	0.002105	0.003251	0.002225	0.001782	0.002478	0.006061	0.002148	0.001754	0.002208	0.002242	0.002437
A7-TS	0.002467	0.006680	0.002032	0.001616	0.001929	0.001862	0.002500	0.002359	0.003674	0.002494	0.001986	0.002780	0.006872	0.002402	0.001958	0.002465	0.002503	0.002728
A8-TS	0.008107	0.018739	0.007071	0.008410	0.006846	0.006617	0.008234	0.007786	0.010936	0.008327	0.007048	0.008968	0.019330	0.008063	0.009185	0.008386	0.008510	0.009016
A10-TS	0.006378	0.038816	0.028114	0.019374	0.023331	0.023712	0.069911	0.060175	0.026033	0.059265	0.023494	0.064822	0.037141	0.034191	0.022332	0.027450	0.027783	0.051917
A11-TS	0.006304	0.006650	0.006219	0.005415	0.006717	0.006752	0.006650	0.006385	0.005618	0.006652	0.006798	0.006363	0.006790	0.006249	0.005361	0.006740	0.006808	0.006746
A12-TS	0.008943	0.024215	0.007366	0.005857	0.006992	0.006751	0.009062	0.008550	0.013318	0.009039	0.007201	0.010078	0.024910	0.008707	0.007098	0.008937	0.009074	0.009889
A13-TS	0.005326	0.006038	0.004918	0.004459	0.005708	0.006096	0.005907	0.006250	0.005327	0.005445	0.005614	0.005685	0.006178	0.005436	0.004556	0.005673	0.005712	0.005806
A1-HTL	0.003982	0.007667	0.004506	0.002904	0.003693	0.003908	0.004133	0.013468	0.004759	0.003777	0.003649	0.004802	0.007113	0.005512	0.003660	0.004618	0.004671	0.004771
A2-HTL	0.001044	0.001061	0.001040	0.000865	0.001029	0.000985	0.001005	0.001014	0.000881	0.001073	0.001063	0.001323	0.001299	0.001329	0.001157	0.001467	0.001491	0.001417
A5-HTL	0.000259	0.000324	0.000263	0.000667	0.000261	0.000250	0.000263	0.000249	0.000254	0.000280	0.000270	0.000264	0.000332	0.000265	0.000646	0.000283	0.000286	0.000284
A6-HTL	0.000044	0.000098	0.000039	0.000032	0.000038	0.000038	0.000045	0.000043	0.000058	0.000045	0.000039	0.000050	0.000102	0.000045	0.000038	0.000048	0.000048	0.000051
A7-HTL	0.000019	0.000050	0.000015	0.000012	0.000014	0.000014	0.000019	0.000018	0.000028	0.000019	0.000015	0.000021	0.000052	0.000018	0.000015	0.000018	0.000019	0.000020
A8-HTL	0.000095	0.000203	0.000084	0.000069	0.000084	0.000082	0.000098	0.000093	0.000122	0.000098	0.000086	0.000108	0.000212	0.000099	0.000082	0.000104	0.000105	0.000110
A10-HTL	0.001283	0.000789	0.000575	0.000399	0.000478	0.000485	0.001398	0.001219	0.000531	0.001188	0.000481	0.001319	0.000756	0.000694	0.000459	0.000561	0.000568	0.001044
A11-HTL	0.000868	0.000915	0.000856	0.000745	0.000924	0.000929	0.000915	0.000879	0.000773	0.000915	0.000936	0.000876	0.000934	0.000860	0.000738	0.000927	0.000937	0.000928
A12-HTL	0.000228	0.000618	0.000188	0.000149	0.000178	0.000172	0.000231	0.000218	0.000340	0.000231	0.000184	0.000257	0.000636	0.000222	0.000181	0.000228	0.000232	0.000252
A1-HTS	0.017979	0.030885	0.020346	0.013271	0.016890	0.017865	0.018453	0.057025	0.019939	0.016937	0.016692	0.021706	0.029794	0.024856	0.016662	0.021044	0.021281	0.021511
A2-HTS	0.018680	0.019085	0.018652	0.015531	0.018539	0.017817	0.018139	0.018226	0.015945	0.019290	0.019132	0.023078	0.022862	0.023162	0.020115	0.025477	0.025892	0.024686
A4-HTS	0.003263	0.003628	0.002993	0.002736	0.003516	0.003755	0.003622	0.003826	0.003074	0.003313	0.003458	0.003312	0.003626	0.003113	0.002627	0.003269	0.003287	0.003366
A5-HTS	0.000982	0.001236	0.000994	0.002471	0.000987	0.000945	0.000996	0.000942	0.000964	0.001058	0.001019	0.001004	0.001272	0.001004	0.002396	0.001072	0.001086	0.001076
A6-HTS	0.001261	0.003368	0.001043	0.000831	0.000993	0.000960	0.001278	0.001207	0.001861	0.001275	0.001022	0.001421	0.003468	0.001232	0.001006	0.001267	0.001286	0.001397
A7-HTS	0.000740	0.002004	0.000610	0.000485	0.000579	0.000559	0.000750	0.000708	0.001102	0.000748	0.000596	0.000834	0.002062	0.000721	0.000587	0.000740	0.000751	0.000818
A8-HTS	0.005287	0.012710	0.004552	0.005013	0.004387	0.004240	0.005367	0.005072	0.007305	0.005411	0.004517	0.005874	0.013101	0.005232	0.005572	0.005426	0.005506	0.005872
A10-HTS	0.032387	0.019828	0.014350	0.009878	0.011910	0.012104	0.035810	0.030745	0.013295	0.030349	0.011993	0.033088	0.018971	0.017471	0.011390	0.014016	0.014186	0.026570
A11-HTS	0.002082	0.002196	0.002054	0.001789	0.002219	0.002230	0.002196	0.002109	0.001855	0.002197	0.002245	0.002101	0.002243	0.002064	0.001770	0.002226	0.002249	0.002228
A12-HTS	0.007833	0.021209	0.006452	0.005130	0.006124	0.005913	0.007937	0.007488	0.011665	0.007917	0.006307	0.008827	0.021818	0.007626	0.006217	0.007828	0.007948	0.008662

	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL	A9-BL	A10-BL	A11-BL	A12-BL	A1-BS	A2-BS	A3-BS	A5-BS	A6-BS	A7-BS	A8-BS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A1-LL	0.000550	0.000917	0.000636	0.000410	0.000524	0.000556	0.000568	0.001876	0.000599	0.000519	0.000516	0.000667	0.000900	0.000778	0.000516	0.000652	0.000659	0.000664
A2-LL	0.000324	0.000326	0.000319	0.000265	0.000315	0.000302	0.000308	0.000315	0.000270	0.000328	0.000325	0.000407	0.000395	0.000401	0.000349	0.000442	0.000449	0.000427
A5-LL	0.000082	0.000096	0.000084	0.000219	0.000083	0.000080	0.000083	0.000078	0.000078	0.000089	0.000086	0.000083	0.000099	0.000084	0.000212	0.000090	0.000091	0.000089
A6-LL	0.000025	0.000047	0.000023	0.000019	0.000023	0.000023	0.000026	0.000025	0.000030	0.000026	0.000024	0.000029	0.000050	0.000027	0.000023	0.000029	0.000029	0.000030
A7-LL	0.000012	0.000033	0.000010	0.000008	0.000009	0.000009	0.000012	0.000011	0.000018	0.000012	0.000009	0.000013	0.000034	0.000012	0.000009	0.000012	0.000012	0.000013
A8-LL	0.000064	0.000119	0.000058	0.000049	0.000059	0.000059	0.000066	0.000063	0.000075	0.000066	0.000061	0.000072	0.000125	0.000068	0.000057	0.000073	0.000074	0.000075
A10-LL	0.000436	0.000273	0.000203	0.000143	0.000170	0.000172	0.000464	0.000415	0.000185	0.000398	0.000172	0.000452	0.000262	0.000240	0.000163	0.000198	0.000200	0.000352
A11-LL	0.000347	0.000366	0.000342	0.000298	0.000369	0.000371	0.000366	0.000351	0.000309	0.000366	0.000374	0.000350	0.000373	0.000343	0.000295	0.000370	0.000374	0.000371
A12-LL	0.000061	0.000166	0.000050	0.000040	0.000048	0.000046	0.000062	0.000058	0.000091	0.000062	0.000049	0.000069	0.000171	0.000060	0.000048	0.000061	0.000062	0.000068
A1-LS	0.004597	0.007333	0.005100	0.003386	0.004301	0.004529	0.004637	0.012762	0.004854	0.004290	0.004259	0.005535	0.007215	0.006216	0.004233	0.005349	0.005411	0.005438
A2-LS	0.003713	0.003731	0.003623	0.003021	0.003591	0.003463	0.003523	0.003632	0.003111	0.003729	0.003701	0.004507	0.004360	0.004362	0.003789	0.004767	0.004842	0.004636
A5-LS	0.000424	0.000517	0.000431	0.001106	0.000428	0.000410	0.000429	0.000406	0.000410	0.000458	0.000443	0.000431	0.000531	0.000433	0.001069	0.000462	0.000468	0.000463
A6-LS	0.000500	0.001343	0.000413	0.000328	0.000392	0.000379	0.000507	0.000478	0.000740	0.000505	0.000404	0.000563	0.001382	0.000488	0.000398	0.000501	0.000509	0.000553
A7-LS	0.000370	0.001001	0.000304	0.000242	0.000289	0.000279	0.000374	0.000353	0.000551	0.000374	0.000297	0.000417	0.001030	0.000360	0.000293	0.000369	0.000375	0.000409
A8-LS	0.002255	0.005946	0.001877	0.001646	0.001788	0.001726	0.002285	0.002157	0.003302	0.002286	0.001841	0.002532	0.006118	0.002203	0.001940	0.002266	0.002301	0.002495
A10-LS	0.006019	0.003689	0.002678	0.001854	0.002221	0.002258	0.006575	0.005718	0.002475	0.005578	0.002236	0.006185	0.003530	0.003245	0.002134	0.002611	0.002643	0.004898
A11-LS	0.004858	0.005124	0.004792	0.004173	0.005176	0.005203	0.005125	0.004920	0.004329	0.005126	0.005238	0.004903	0.005232	0.004815	0.004131	0.005193	0.005246	0.005198
A12-LS	0.000881	0.002388	0.000726	0.000577	0.000689	0.000665	0.000893	0.000843	0.001313	0.000891	0.000710	0.000993	0.002456	0.000858	0.000700	0.000881	0.000894	0.000975
A1-OL	0.010670	0.020695	0.012165	0.007714	0.009823	0.010421	0.011030	0.036629	0.012778	0.010044	0.009694	0.012867	0.019143	0.014849	0.009722	0.012265	0.012402	0.012691
A2-OL	0.002613	0.002621	0.002566	0.002130	0.002519	0.002409	0.002462	0.002534	0.002157	0.002631	0.002605	0.003619	0.003284	0.003384	0.002958	0.003744	0.003808	0.003605
A3-OL	0.001302	0.001448	0.001195	0.001092	0.001403	0.001499	0.001446	0.001527	0.001227	0.001322	0.001380	0.001322	0.001447	0.001242	0.001048	0.001305	0.001312	0.001343
A5-OL	0.000424	0.000517	0.000431	0.001106	0.000428	0.000410	0.000429	0.000406	0.000410	0.000458	0.000443	0.000431	0.000531	0.000433	0.001069	0.000462	0.000468	0.000463
A6-OL	0.000086	0.000224	0.000072	0.000058	0.000069	0.000067	0.000088	0.000083	0.000125	0.000088	0.000071	0.000097	0.000231	0.000085	0.000070	0.000088	0.000089	0.000096
A7-OL	0.000092	0.000250	0.000076	0.000060	0.000072	0.000069	0.000093	0.000088	0.000137	0.000093	0.000074	0.000104	0.000257	0.000090	0.000073	0.000092	0.000093	0.000102
A8-OL	0.000408	0.000531	0.000413	0.001089	0.000407	0.000388	0.000413	0.000389	0.000408	0.000441	0.000421	0.000414	0.000542	0.000412	0.001051	0.000438	0.000444	0.000442
A9-OL	0.045093	0.072071	0.064076	0.036642	0.047789	0.052337	0.050846	0.052488	0.048383	0.044543	0.046419	0.056143	0.076491	0.077678	0.046076	0.058092	0.058633	0.058772
A10-OL	0.018127	0.011070	0.007961	0.005423	0.006619	0.006723	0.020495	0.017182	0.007410	0.017335	0.006667	0.018318	0.010586	0.009787	0.006271	0.007803	0.007898	0.015094
A11-OL	0.000751	0.000793	0.000741	0.000645	0.000801	0.000805	0.000793	0.000761	0.000670	0.000793	0.000810	0.000758	0.000809	0.000745	0.000639	0.000803	0.000812	0.000804
A12-OL	0.000585	0.001586	0.000482	0.000383	0.000458	0.000442	0.000593	0.000560	0.000872	0.000592	0.000471	0.000660	0.001632	0.000570	0.000465	0.000585	0.000594	0.000647
A1-JS	0.008917	0.015064	0.009864	0.006712	0.008511	0.008946	0.009236	0.026379	0.009862	0.008558	0.008437	0.010766	0.014611	0.012088	0.008403	0.010619	0.010742	0.010822
A2-OS	0.007423	0.007495	0.007325	0.006091	0.007233	0.006938	0.007075	0.007223	0.006214	0.007537	0.007470	0.009414	0.009147	0.009331	0.008131	0.010284	0.010456	0.009938
A5-OS	0.002152	0.002670	0.002184	0.005553	0.002167	0.002074	0.002181	0.002061	0.002100	0.002322	0.002240	0.002191	0.002741	0.002196	0.005373	0.002344	0.002376	0.002351
A6-OS	0.000140	0.000351	0.000118	0.000095	0.000114	0.000111	0.000142	0.000135	0.000198	0.000142	0.000117	0.000158	0.000363	0.000130	0.000114	0.000144	0.000146	0.000157
A7-OS	0.000185	0.000500	0.000152	0.000121	0.000144	0.000139	0.000187	0.000176	0.000275	0.000187	0.000148	0.000208	0.000515	0.000180	0.000146	0.000184	0.000187	0.000204
A8-OS	0.001056	0.002540	0.000910	0.001031	0.000876	0.000845	0.001071	0.001012	0.001460	0.001081	0.000902	0.001171	0.002617	0.001043	0.001139	0.001081	0.001097	0.001171
A10-OS	0.010998	0.006726	0.004875	0.003374	0.004034	0.004104	0.011972	0.010452	0.004507	0.010150	0.004060	0.011323	0.006435	0.005908	0.003889	0.004748	0.004805	0.008916
A11-OS	0.002301	0.002428	0.002270	0.001977	0.002452	0.002465	0.002428	0.002331	0.002051	0.002428	0.002482	0.002323	0.002479	0.002281	0.001957	0.002460	0.002486	0.002463
A12-OS	0.002528	0.006846	0.002082	0.001656	0.001976	0.001908	0.002562	0.002417	0.003765	0.002555	0.002036	0.002849	0.007043	0.002461	0.002007	0.002527	0.002565	0.002796
A14	0.076488	0.109850	0.099781	0.062946	0.080504	0.085589	0.084189	0.086125	0.079239	0.077235	0.079362	0.094353	0.118190	0.121534	0.079290	0.100236	0.101342	0.100454
A15	0.362112	0.404714	0.388078	0.306170	0.369103	0.351938	0.366790	0.337006	0.431898	0.409300	0.382173	0.347529	0.380366	0.370859	0.292994	0.369850	0.374587	0.371705
C-1	0.218299	0.327229	0.290489	0.169295	0.219826	0.239190	0.233283	1.110343	0.222370	0.206442	0.214230	0.267204	0.347058	0.352371	0.212996	0.268701	0.271307	0.271410
C-2	0.080292	0.318338	0.057899	0.045671	0.054342	0.052915	0.082054	0.077171	0.163191	0.078108	0.055769	0.092908	0.233374	0.073396	0.059441	0.074663	0.075845	0.087671



	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL	A9-BL	A10-BL	A11-BL	A12-BL	A1-BS	A2-BS	A3-BS	A5-BS	A6-BS	A7-BS	A8-BS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
C-3	0.196541	0.221525	0.169238	0.164205	0.217082	0.241819	0.226516	0.237190	0.188003	0.193586	0.209017	0.243349	0.256784	0.233698	0.201708	0.253950	0.255932	0.255556
C-4	0.025100	0.110247	0.078161	0.017104	0.020375	0.019759	0.024952	0.024401	0.040701	0.024862	0.020947	0.030311	0.106364	0.081332	0.022560	0.028439	0.028898	0.030183
C-5	0.033109	0.046599	0.039941	0.025250	0.032943	0.036152	0.035030	0.143372	0.032650	0.030594	0.031965	0.041834	0.051253	0.051396	0.033410	0.042206	0.042632	0.042433
C-6	0.008909	0.008796	0.009575	0.007815	0.009295	0.008583	0.008782	0.007553	0.007483	0.009854	0.009750	0.008884	0.009282	0.009270	0.008017	0.010215	0.010373	0.009936
C-7	0.028697	0.060682	0.101131	0.022476	0.028550	0.030059	0.031195	0.030419	0.038173	0.028805	0.028279	0.037997	0.054898	0.109461	0.031709	0.040328	0.040863	0.040623
C-8	0.036725	0.044270	0.038334	0.024328	0.031088	0.033018	0.032696	0.040953	0.031394	0.030012	0.030662	0.044800	0.046804	0.046717	0.030633	0.038722	0.039151	0.038904
C-9	0.001273	0.001258	0.001372	0.001111	0.001316	0.001208	0.001250	0.001104	0.001063	0.001409	0.001383	0.001130	0.001204	0.001152	0.000984	0.001244	0.001261	0.001230
C-10	0.036572	0.039941	0.035234	0.031045	0.038809	0.039740	0.039104	0.039662	0.033355	0.038048	0.038945	0.044678	0.047014	0.045301	0.039124	0.049633	0.050279	0.048872
C-11	0.002444	0.009809	0.011309	0.001422	0.001701	0.001669	0.002506	0.002375	0.006083	0.002380	0.001741	0.002816	0.006832	0.011334	0.001821	0.002287	0.002322	0.002665
C-12	0.135502	0.142662	0.128884	0.112940	0.140868	0.143296	0.140627	0.141641	0.119304	0.138202	0.141795	0.163829	0.165873	0.160488	0.138611	0.175929	0.178209	0.172953
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.154245	0.161843	0.160947	0.133279	0.159490	0.151413	0.154958	0.148723	0.134239	0.167225	0.165436	0.206556	0.210931	0.221748	0.193376	0.248010	0.252450	0.237653
C-15	0.041587	0.044028	0.042471	0.035718	0.043526	0.042516	0.042832	0.041423	0.038169	0.044752	0.044609	0.042931	0.045863	0.043587	0.037044	0.046765	0.047356	0.046387
C-16	0.005273	0.005385	0.005542	0.004552	0.005450	0.005135	0.005282	0.004973	0.004498	0.005751	0.005671	0.005147	0.005476	0.005246	0.004483	0.005671	0.005750	0.005607
C-17	0.032109	0.018941	0.014717	0.012462	0.010735	0.011521	0.011781	0.031893	0.012476	0.010590	0.010534	0.043807	0.018059	0.014424	0.014182	0.012674	0.012798	0.013067
C-18	0.023118	0.025707	0.021208	0.019385	0.024911	0.026604	0.025663	0.027105	0.021777	0.023477	0.024504	0.023465	0.025694	0.022057	0.018612	0.023163	0.023289	0.023847
C-19	0.108564	0.293952	0.089419	0.071096	0.084872	0.081956	0.110005	0.103787	0.161677	0.109731	0.087411	0.122340	0.302394	0.105694	0.086170	0.108494	0.110158	0.120047
C-20	0.034212	0.036035	0.034025	0.029445	0.036319	0.036245	0.035844	0.034648	0.030334	0.036210	0.036874	0.038588	0.040477	0.039150	0.033860	0.042903	0.043461	0.042203
C-21	0.025579	0.026863	0.026850	0.083238	0.026364	0.024973	0.025735	0.024212	0.023389	0.027999	0.027372	0.025013	0.027007	0.025615	0.079025	0.027315	0.027686	0.027113
C-22	0.280068	0.170971	0.122792	0.083416	0.102157	0.103740	0.318514	0.265369	0.114408	0.269275	0.102910	0.282197	0.163490	0.151299	0.096520	0.120463	0.121934	0.234163
C-23	0.243542	0.247694	0.250983	0.211373	0.256743	0.247786	0.248640	0.227888	0.210213	0.263130	0.264486	0.234185	0.248944	0.234777	0.201550	0.254332	0.257396	0.252361
C-24	0.066188	0.063994	0.072933	0.058535	0.068745	0.061886	0.064008	0.053584	0.054657	0.074205	0.072835	0.058861	0.056491	0.048396	0.061143	0.062006	0.060162	
C-25	0.073266	0.077288	0.072279	0.062939	0.078068	0.078470	0.077291	0.074212	0.065292	0.077312	0.079009	0.073949	0.078913	0.072628	0.062301	0.078329	0.079128	0.078398
C-26	0.010135	0.011489	0.009358	0.008485	0.010861	0.011601	0.011240	0.011893	0.010137	0.010361	0.010683	0.010817	0.011756	0.010345	0.008669	0.010795	0.010869	0.011047
C-27	0.052382	0.093026	0.064162	0.036263	0.043616	0.042267	0.054142	0.055534	0.167029	0.071966	0.044853	0.058323	0.072561	0.079592	0.043049	0.054376	0.055186	0.059182
Ld-BL	0.496437	0.071931	0.110281	0.187033	0.037152	0.039086	0.040836	0.120461	0.047152	0.037720	0.036811	0.047279	0.066510	0.053248	0.037402	0.046200	0.046730	0.047377
Ld-BS	0.069064	0.120668	0.076219	0.054035	0.065538	0.068786	0.071648	0.205925	0.078034	0.066450	0.065012	0.579002	0.116037	0.165871	0.232138	0.081665	0.082612	0.083523
Ld-CL	0.010989	0.020894	0.012456	0.008694	0.010226	0.010809	0.011414	0.036880	0.013046	0.010456	0.010109	0.013155	0.019424	0.015108	0.010635	0.012650	0.012791	0.013072
Ld-CS	0.023614	0.042284	0.026202	0.018451	0.022274	0.023405	0.024483	0.072160	0.027061	0.022652	0.022082	0.028381	0.040106	0.031971	0.022781	0.027740	0.028060	0.028442
Ld-TL	0.013377	0.025179	0.015059	0.010187	0.012516	0.013214	0.013923	0.044123	0.015799	0.012778	0.012381	0.016071	0.023508	0.018355	0.012644	0.015564	0.015740	0.016047
Ld-TS	0.036708	0.065234	0.040314	0.028521	0.034732	0.036436	0.038133	0.108688	0.041936	0.035364	0.034460	0.044152	0.061993	0.049300	0.035303	0.043311	0.043815	0.044381
Ld-HTL	0.001902	0.003633	0.002148	0.001458	0.001768	0.001866	0.001973	0.006330	0.002264	0.001810	0.001749	0.002287	0.003377	0.002619	0.001809	0.002205	0.002230	0.002276
Ld-HTS	0.007478	0.012758	0.008434	0.005762	0.007026	0.007416	0.007674	0.023352	0.008262	0.007065	0.006951	0.009000	0.012321	0.010274	0.007134	0.008733	0.008831	0.008929
Ld-LL	0.000271	0.000446	0.000312	0.000227	0.000259	0.000274	0.000280	0.000893	0.000293	0.000258	0.000256	0.000326	0.000438	0.000379	0.000275	0.000320	0.000324	0.000326
Ld-LS	0.001523	0.002395	0.001678	0.001237	0.001425	0.001494	0.001537	0.004089	0.001596	0.001431	0.001415	0.001821	0.002361	0.002031	0.001500	0.001763	0.001783	0.001793
Ld-OL	0.005196	0.009913	0.005887	0.003886	0.004799	0.005079	0.005372	0.017369	0.006164	0.004909	0.004741	0.006245	0.009201	0.007165	0.004836	0.005968	0.006035	0.006170
Ld-OS	0.004469	0.007363	0.004903	0.003943	0.004279	0.004463	0.012464	0.012464	0.004881	0.004330	0.004257	0.005338	0.007177	0.005940	0.004707	0.005294	0.005357	0.005389
Ld-LSD	0.003245	0.005746	0.003602	0.002416	0.003065	0.003227	0.003361	0.009921	0.003690	0.003103	0.003036	0.009843	0.005478	0.004413	0.003031	0.003829	0.003873	0.003920
Lb-BL	0.035082	0.141172	0.016809	0.070810	0.602189	0.413563	0.067454	0.023474	0.107989	0.290043	0.696150	0.018865	0.027187	0.016798	0.013752	0.016858	0.017101	0.018521
Lb-BS	0.087695	0.136052	0.070887	0.059311	0.066831	0.065596	0.089837	0.100204	0.086079	0.087040	0.068351	0.155407	0.312950	0.089797	0.276394	1.000709	1.029796	0.421997
Lb-CL	0.007023	0.010741	0.006016	0.005138	0.005823	0.005701	0.007207	0.007429	0.007030	0.007116	0.005962	0.007582	0.011033	0.006655	0.005690	0.006773	0.006865	0.007452
Lb-CS	0.036962	0.056682	0.029858	0.023901	0.027851	0.027488	0.038226	0.045755	0.035870	0.036687	0.028416	0.040902	0.057982	0.034871	0.028054	0.034212	0.034690	0.039257
Lb-TL	0.009296	0.014105	0.008208	0.006462	0.007518	0.007580	0.009738	0.014662	0.009154	0.009233	0.007597	0.010239	0.014046	0.009444	0.007387	0.008872	0.008983	0.009957

	A1-BL	A2-BL	A3-BL	A5-BL	A6-BL	A7-BL	A8-BL	A9-BL	A10-BL	A11-BL	A12-BL	A1-BS	A2-BS	A3-BS	A5-BS	A6-BS	A7-BS	A8-BS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Lb-TS	0.074677	0.103908	0.057716	0.046747	0.053933	0.054051	0.078756	0.096757	0.067131	0.073652	0.054656	0.080961	0.104415	0.066798	0.053293	0.063771	0.064590	0.076286
Lb-HTL	0.000987	0.001450	0.000823	0.000671	0.000804	0.000797	0.001026	0.001119	0.000955	0.000992	0.000818	0.001073	0.001488	0.000932	0.000759	0.000941	0.000953	0.001050
Lb-HTS	0.045028	0.061416	0.033641	0.026907	0.031500	0.031258	0.047321	0.051401	0.039485	0.044460	0.032063	0.048828	0.062738	0.039124	0.031081	0.037879	0.038390	0.045838
Lb-LL	0.000326	0.000378	0.000277	0.000233	0.000268	0.000263	0.000336	0.000371	0.000271	0.000328	0.000273	0.000350	0.000389	0.000304	0.000255	0.000306	0.000310	0.000340
Lb-LS	0.013002	0.018153	0.010981	0.009054	0.010691	0.010615	0.013503	0.014836	0.012235	0.013076	0.010880	0.013860	0.018477	0.012066	0.009880	0.012061	0.012213	0.013486
Lb-OL	0.002509	0.002825	0.002333	0.001911	0.002280	0.002203	0.002575	0.002496	0.002147	0.002625	0.002348	0.002611	0.002914	0.002425	0.002020	0.002521	0.002555	0.002671
Lb-OS	0.008880	0.014308	0.007353	0.006322	0.006954	0.006869	0.009152	0.010791	0.009040	0.008851	0.007092	0.009823	0.014680	0.008518	0.007268	0.008447	0.008564	0.009508
Lb-HRD	0.269653	0.178056	0.112029	0.273856	0.490192	0.689677	0.454485	0.217370	0.305771	0.205795	0.407028	0.236900	0.156555	0.130963	0.136957	0.177163	0.163711	0.186622
K-BL	0.124263	0.276572	0.717213	0.353405	0.026835	0.027313	0.434779	0.064380	0.302060	0.485298	0.027005	0.037450	0.038770	0.034007	0.027956	0.032460	0.032865	0.036250
K-BS	0.052053	0.062908	0.050791	0.046438	0.048771	0.047620	0.051201	0.068219	0.047048	0.052470	0.049992	0.127503	0.416760	0.745623	0.377450	0.070346	0.068134	0.562626
K-CL	0.011690	0.016118	0.011921	0.010954	0.011465	0.011721	0.012228	0.019868	0.011621	0.011801	0.011515	0.012861	0.016053	0.013292	0.011828	0.012806	0.012949	0.013138
K-CS	0.011498	0.016519	0.011035	0.010670	0.010232	0.010235	0.011722	0.019671	0.011297	0.011464	0.010378	0.013345	0.016947	0.013171	0.012373	0.012878	0.013055	0.013459
K-TL	0.006182	0.007944	0.005702	0.005226	0.005560	0.005734	0.006587	0.009700	0.005710	0.006172	0.005561	0.006705	0.007885	0.006407	0.005616	0.006125	0.006189	0.006642
K-TS	0.024533	0.030479	0.019905	0.018347	0.018938	0.019353	0.026101	0.036392	0.020990	0.024131	0.019022	0.026687	0.030287	0.023026	0.020256	0.021796	0.022048	0.025413
K-HTL	0.001215	0.001463	0.001176	0.001097	0.001143	0.001142	0.001248	0.001806	0.001098	0.001233	0.001160	0.001365	0.001513	0.001346	0.001232	0.001359	0.001376	0.001399
K-HTS	0.011604	0.014422	0.009472	0.008966	0.009664	0.009781	0.012303	0.012544	0.010306	0.011659	0.009751	0.011247	0.014876	0.010679	0.009705	0.010838	0.010964	0.012177
K-LL	0.000436	0.000471	0.000402	0.000380	0.000405	0.000399	0.000442	0.000465	0.000369	0.000444	0.000413	0.000487	0.000509	0.000455	0.000426	0.000481	0.000488	0.000496
K-LS	0.003485	0.004561	0.003057	0.002818	0.003100	0.003065	0.003590	0.003442	0.003246	0.003552	0.003161	0.003744	0.004751	0.003346	0.003047	0.003509	0.003554	0.003748
K-OL	0.012714	0.011216	0.008423	0.006531	0.007437	0.007632	0.014034	0.015400	0.007815	0.012369	0.007456	0.013370	0.011025	0.009929	0.007370	0.008603	0.008702	0.012029
K-OS	0.006704	0.007033	0.005660	0.005965	0.005545	0.005457	0.006878	0.007191	0.005319	0.006735	0.005664	0.007421	0.007491	0.006500	0.006616	0.006689	0.006782	0.007318
B-L	0.664165	0.497966	0.853475	0.618610	0.674841	0.487825	0.551219	0.215579	0.464194	0.822397	0.769118	0.111562	0.140680	0.112117	0.086020	0.104283	0.105595	0.110720
B-S	0.257818	0.357445	0.230282	0.207220	0.256561	0.278944	0.282721	0.414409	0.261364	0.249591	0.250128	0.905745	0.880609	1.032989	0.916040	1.191268	1.217790	1.107377
C-L	0.034738	0.054092	0.035975	0.028977	0.032542	0.032990	0.035823	0.072357	0.036408	0.034727	0.032807	0.042013	0.052638	0.040565	0.032462	0.037689	0.038142	0.039091
C-S	0.108073	0.142310	0.089230	0.088244	0.117766	0.136408	0.127645	0.166648	0.111813	0.102008	0.111028	0.114442	0.139400	0.101917	0.084339	0.101982	0.101834	0.108954
T-L	0.031565	0.049836	0.032006	0.024266	0.028363	0.028959	0.032820	0.070649	0.032868	0.031248	0.028502	0.035417	0.047968	0.036732	0.027814	0.033315	0.033712	0.035329
T-S	0.219919	0.258531	0.160980	0.177411	0.251196	0.305634	0.276104	0.309550	0.221631	0.201491	0.230189	0.225763	0.249365	0.184914	0.154732	0.188023	0.186169	0.207467
HT-L	0.005499	0.007905	0.005678	0.004453	0.005155	0.005104	0.005596	0.010411	0.005470	0.005594	0.005252	0.006001	0.007721	0.006225	0.004943	0.005954	0.006031	0.006141
HT-S	0.104203	0.116832	0.072495	0.081562	0.116278	0.140953	0.130406	0.119473	0.101557	0.096024	0.106791	0.105472	0.115219	0.082153	0.069969	0.085865	0.085002	0.096390
Lo-L	0.001399	0.001642	0.001405	0.001162	0.001302	0.001254	0.001399	0.002012	0.001228	0.001446	0.001341	0.001479	0.001669	0.001472	0.001243	0.001472	0.001493	0.001517
Lo-S	0.050576	0.047690	0.031917	0.045699	0.071447	0.092233	0.070743	0.048500	0.052783	0.044311	0.063075	0.047953	0.045686	0.034818	0.031963	0.039950	0.038790	0.042558
O-L	0.023151	0.027101	0.019631	0.014651	0.017295	0.017525	0.024682	0.038877	0.018581	0.022851	0.017440	0.026005	0.026229	0.022380	0.016549	0.020035	0.020276	0.023780
O-S	0.047491	0.049181	0.035039	0.043041	0.060258	0.073568	0.060937	0.052384	0.047744	0.043846	0.055106	0.046634	0.047972	0.037770	0.034787	0.041237	0.040676	0.043484
COM	0.051980	0.053237	0.054327	0.045059	0.054258	0.051635	0.052444	0.049275	0.044693	0.056473	0.056224	0.050845	0.053813	0.051126	0.043751	0.055276	0.056002	0.054674
FA1	0.119777	0.113973	0.136475	0.105914	0.121379	0.104115	0.111840	0.092693	0.096167	0.136757	0.130932	0.103327	0.108768	0.109689	0.094008	0.119500	0.121594	0.116128
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.053788	0.051182	0.061287	0.047563	0.054508	0.046755	0.050224	0.041626	0.043186	0.061413	0.058798	0.046401	0.048844	0.049258	0.042216	0.053664	0.054604	0.052149
FA4	0.113644	0.114298	0.121984	0.099639	0.118305	0.109725	0.112280	0.101556	0.096284	0.125209	0.123886	0.117472	0.122860	0.122855	0.106157	0.134984	0.137099	0.131157
FA5	0.028819	0.028534	0.030898	0.025310	0.030125	0.027949	0.028510	0.024878	0.024280	0.031807	0.031542	0.027305	0.028781	0.028110	0.024231	0.030711	0.031151	0.030079
FA6	0.031875	0.030392	0.035704	0.028317	0.032957	0.029057	0.030319	0.024360	0.025998	0.036079	0.035195	0.031304	0.032277	0.033573	0.029156	0.037328	0.037987	0.035840
FA7	0.053788	0.051182	0.061287	0.047563	0.054508	0.046755	0.050224	0.041626	0.043186	0.061413	0.058798	0.046401	0.048844	0.049258	0.042216	0.053664	0.054604	0.052149
FA8	0.181937	0.185781	0.191227	0.157061	0.188048	0.177165	0.182231	0.171590	0.155178	0.198410	0.195674	0.177602	0.188943	0.181015	0.154668	0.195665	0.198381	0.193466
FA9	0.005008	0.005129	0.005234	0.004341	0.005227	0.004975	0.005053	0.004747	0.004306	0.005441	0.005417	0.004899	0.005184	0.004926	0.004215	0.005325	0.005395	0.005267

	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A1-BL	0.138915	0.095071	0.100297	0.066401	0.079339	0.156220	0.086741	0.054953	0.072354	0.077612	0.077150	0.261160	0.133654	0.068685	0.072071	0.104744	0.147709	0.119202
A2-BL	0.032258	0.036165	0.040626	0.022194	0.025368	0.025908	0.022748	0.019080	0.022602	0.023519	0.023475	0.026839	0.025092	0.024314	0.024006	0.028932	0.028320	0.026890
A3-BL	0.007073	0.005955	0.006184	0.004897	0.006526	0.007344	0.005985	0.005241	0.006788	0.007217	0.006933	0.007302	0.007438	0.006543	0.006894	0.006872	0.007471	0.006507
A5-BL	0.003902	0.003442	0.003611	0.002245	0.003180	0.004100	0.003078	0.004947	0.003019	0.003113	0.003184	0.003092	0.003735	0.003415	0.003264	0.003198	0.004471	0.003110
A6-BL	0.001539	0.000693	0.000653	0.000386	0.000597	0.002054	0.000473	0.000373	0.000446	0.000464	0.000543	0.000602	0.001520	0.000538	0.000476	0.000651	0.002492	0.000563
A7-BL	0.001523	0.000678	0.000635	0.000375	0.000584	0.002040	0.000461	0.000363	0.000433	0.000450	0.000530	0.000589	0.001506	0.000525	0.000462	0.000635	0.002477	0.000548
A8-BL	0.003727	0.002046	0.002011	0.001213	0.001798	0.004727	0.001541	0.001697	0.001485	0.001539	0.001700	0.001797	0.003651	0.001734	0.001590	0.001917	0.005632	0.001734
A9-BL	0.112335	0.088332	0.094435	0.066783	0.068544	0.125581	0.098875	0.052464	0.071884	0.078126	0.073843	0.084589	0.108049	0.061904	0.069512	0.096492	0.129136	0.130800
A10-BL	0.019661	0.027243	0.015244	0.009892	0.032346	0.021700	0.014292	0.009258	0.011450	0.012135	0.025386	0.033024	0.018869	0.019913	0.011710	0.035667	0.020974	0.022837
A11-BL	0.003407	0.003180	0.003438	0.002369	0.003547	0.003450	0.003468	0.002935	0.003558	0.003683	0.003650	0.003230	0.003492	0.003881	0.003818	0.004043	0.003843	0.004019
A12-BL	0.016755	0.007453	0.006990	0.004122	0.006426	0.022438	0.005068	0.003992	0.004767	0.004950	0.005826	0.006476	0.016565	0.005771	0.005086	0.006988	0.027242	0.006031
A1-BS	0.222748	0.155129	0.164062	0.108355	0.128861	0.248483	0.139901	0.089917	0.118223	0.126737	0.125774	0.412679	0.213604	0.112390	0.117920	0.170647	0.236634	0.192944
A2-BS	0.111069	0.125243	0.140754	0.076751	0.085596	0.088735	0.078387	0.065619	0.078245	0.081373	0.081248	0.090712	0.086149	0.084374	0.083203	0.097912	0.097274	0.092683
A3-BS	0.000741	0.000624	0.000648	0.000513	0.000684	0.000769	0.000627	0.000549	0.000711	0.000756	0.000726	0.000765	0.000779	0.000685	0.000722	0.000720	0.000783	0.000682
A5-BS	0.009724	0.008573	0.008994	0.005590	0.007918	0.010218	0.007664	0.012310	0.007518	0.007753	0.007928	0.007700	0.009306	0.008503	0.008128	0.007966	0.011146	0.007746
A6-BS	0.004616	0.002080	0.001958	0.001157	0.001791	0.006161	0.001418	0.001120	0.001339	0.001391	0.001629	0.001807	0.004560	0.001614	0.001427	0.001952	0.007476	0.001690
A7-BS	0.005331	0.002371	0.002224	0.001312	0.002045	0.007139	0.001613	0.001270	0.001517	0.001575	0.001854	0.002061	0.005271	0.001836	0.001618	0.002224	0.008668	0.001919
A8-BS	0.014085	0.007305	0.007093	0.004255	0.006402	0.018161	0.005384	0.005616	0.005154	0.005342	0.005990	0.006402	0.013839	0.006076	0.005517	0.006841	0.021755	0.006117
A10-BS	1.034176	0.046539	0.026541	0.017246	0.056200	0.037687	0.024956	0.016431	0.019989	0.021185	0.043329	0.057299	0.032809	0.034127	0.020438	0.061802	0.036423	0.039306
A11-BS	0.006875	1.006417	0.006939	0.004780	0.007159	0.006962	0.006998	0.005924	0.007180	0.007432	0.007367	0.006518	0.007047	0.007832	0.007705	0.008160	0.007757	0.008111
A12-BS	0.060014	0.026696	1.025037	0.014765	0.023016	0.080370	0.018154	0.014297	0.017076	0.017729	0.020867	0.023195	0.059334	0.020671	0.018217	0.025031	0.097576	0.021603
A13-BS	0.001869	0.001672	0.001686	1.001294	0.002961	0.002278	0.003095	0.002532	0.002877	0.002890	0.002963	0.001899	0.002368	0.003550	0.003269	0.001826	0.001966	0.001729
A1-CL	0.039439	0.025287	0.026419	0.017664	1.021458	0.045636	0.024123	0.014468	0.019155	0.020597	0.020604	0.078449	0.038401	0.018078	0.018979	0.028009	0.042083	0.032704
A2-CL	0.009327	0.010514	0.011843	0.006415	0.007225	1.007395	0.006400	0.005377	0.006362	0.006628	0.006610	0.007727	0.007143	0.006808	0.006740	0.008290	0.008090	0.007642
A3-CL	0.002627	0.002212	0.002297	0.001819	0.002424	0.002728	1.002223	0.001947	0.002521	0.002681	0.002575	0.002712	0.002763	0.002430	0.002561	0.002552	0.002775	0.002417
A5-CL	0.003019	0.002632	0.002757	0.001713	0.002430	0.003193	0.002347	1.003758	0.002301	0.002373	0.002430	0.002363	0.002892	0.002605	0.002488	0.002445	0.003493	0.002375
A6-CL	0.000328	0.000150	0.000142	0.000084	0.000129	0.000435	0.000103	0.000081	1.000097	0.000101	0.000118	0.000130	0.000323	0.000117	0.000104	0.000141	0.000528	0.000123
A7-CL	0.001219	0.000542	0.000508	0.000300	0.000467	0.001632	0.000369	0.000290	0.000347	1.000360	0.000424	0.000471	0.001205	0.000420	0.000370	0.000508	0.001981	0.000439
A8-CL	0.002239	0.001230	0.001210	0.000730	0.001079	0.002837	0.000924	0.001005	0.000892	0.000925	1.001021	0.001080	0.002192	0.001040	0.000954	0.001153	0.003382	0.001044
A9-CL	0.055825	0.043853	0.046887	0.033125	0.033999	0.062407	0.049631	0.026017	0.035638	0.038729	0.036617	1.041934	0.053707	0.030709	0.034468	0.047872	0.064044	0.065213
A10-CL	0.004502	0.006127	0.003489	0.002269	0.007419	0.004968	0.003284	0.002162	0.002626	0.002784	0.005702	0.007564	1.004322	0.004486	0.002683	0.008159	0.004800	0.005177
A11-CL	0.005698	0.005318	0.005751	0.003962	0.005933	0.005771	0.005800	0.004910	0.005951	0.006160	0.006106	0.005403	0.005840	1.006491	0.006386	0.006764	0.006429	0.006723
A12-CL	0.006489	0.002886	0.002707	0.001596	0.002489	0.008690	0.001963	0.001546	0.001846	0.001917	0.002256	0.002508	0.006415	0.002235	1.001970	0.002706	0.010550	0.002336
A1-CS	0.084938	0.057918	0.061074	0.040417	0.048382	0.095631	0.052816	0.033463	0.044045	0.047241	0.046997	0.158599	0.081759	0.041851	0.043881	1.063798	0.090260	0.072551
A2-CS	0.027069	0.030292	0.033942	0.018691	0.021314	0.021962	0.019673	0.016447	0.019604	0.020364	0.020350	0.022319	0.021370	0.021246	0.020896	0.024175	1.024024	0.022982
A3-CS	0.000269	0.000227	0.000236	0.000187	0.000249	0.000280	0.000228	0.000200	0.000259	0.000275	0.000264	0.000278	0.000283	0.000249	0.000263	0.000265	1.000248	0.000248
A5-CS	0.003902	0.003442	0.003611	0.002245	0.003180	0.004100	0.003078	0.004947	0.003019	0.003113	0.003184	0.003092	0.003735	0.003415	0.003264	0.003198	0.004471	0.003110
A6-CS	0.001090	0.000498	0.000471	0.000279	0.000428	0.001449	0.000341	0.000269	0.000323	0.000335	0.000391	0.000433	0.001075	0.000387	0.000344	0.000468	0.001757	0.000406
A7-CS	0.003046	0.001355	0.001271	0.000750	0.001168	0.004080	0.000922	0.000726	0.000867	0.000900	0.001059	0.001177	0.003012	0.001049	0.000925	0.001271	0.004953	0.001097
A8-CS	0.006929	0.003558	0.003455	0.002071	0.003094	0.008945	0.002582	0.002526	0.002481	0.002575	0.002892	0.003111	0.006802	0.002915	0.002649	0.003340	0.010738	0.002980
A10-CS	0.012625	0.017325	0.009805	0.006366	0.020750	0.013924	0.009206	0.006019	0.007378	0.007818	0.016137	0.021168	0.012118	0.012693	0.007546	0.022844	0.013459	0.014582
A11-CS	0.002725	0.002544	0.002751	0.001895	0.002838	0.002760	0.002774	0.002348	0.002846	0.002946	0.002920	0.002584	0.002793	0.003105	0.003054	0.003235	0.003075	0.003215
A12-CS	0.023914	0.010638	0.009977	0.005884	0.009171	0.032026	0.007234	0.005697	0.006804	0.007065	0.008315	0.009243	0.023643	0.008237	0.007259	0.009974	0.038882	0.008608

	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A1-TL	0.048071	0.031459	0.032976	0.021939	0.026416	0.055090	0.029361	0.018050	0.023833	0.025598	0.025575	0.093358	0.046614	0.022580	0.023672	0.034665	0.051157	0.040011
A2-TL	0.003582	0.003882	0.004306	0.002452	0.003085	0.003063	0.002827	0.002361	0.002786	0.002887	0.002891	0.003120	0.002988	0.003051	0.002984	0.003404	0.003315	0.003191
A3-TL	0.002122	0.001787	0.001855	0.001469	0.001958	0.002203	0.001796	0.001572	0.002036	0.002165	0.002080	0.002191	0.002231	0.001963	0.002068	0.002062	0.002241	0.001952
A4-TL	0.000424	0.000357	0.000371	0.000294	0.000392	0.000441	0.000359	0.000314	0.000407	0.000433	0.000416	0.000438	0.000446	0.000393	0.000414	0.000412	0.000448	0.000390
A5-TL	0.001433	0.001282	0.001347	0.000838	0.001186	0.001494	0.001151	0.001861	0.001129	0.001164	0.001189	0.001152	0.001371	0.001276	0.001221	0.001191	0.001623	0.001160
A6-TL	0.000160	0.000076	0.000072	0.000043	0.000065	0.000211	0.000052	0.000041	0.000050	0.000052	0.000060	0.000066	0.000158	0.000059	0.000053	0.000071	0.000255	0.000062
A7-TL	0.000305	0.000136	0.000127	0.000075	0.000117	0.000408	0.000092	0.000073	0.000087	0.000090	0.000106	0.000118	0.000301	0.000105	0.000092	0.000127	0.000495	0.000110
A8-TL	0.001807	0.000965	0.000946	0.000569	0.000837	0.002304	0.000706	0.000699	0.000684	0.000710	0.000789	0.000844	0.001768	0.000796	0.000729	0.000907	0.002758	0.000816
A9-TL	0.054023	0.042606	0.045544	0.032286	0.033130	0.060338	0.046406	0.025377	0.034793	0.037822	0.035719	0.040944	0.051928	0.029913	0.033628	0.046623	0.062355	0.062397
A10-TL	0.007375	0.010265	0.005720	0.003710	0.012124	0.008139	0.005357	0.003456	0.004295	0.004551	0.009568	0.012383	0.007077	0.007501	0.004394	0.013378	0.007868	0.008587
A11-TL	0.002539	0.002370	0.002563	0.001766	0.002644	0.002572	0.002585	0.002188	0.002652	0.002745	0.002721	0.002408	0.002603	0.002893	0.002846	0.003014	0.002865	0.002996
A12-TL	0.004113	0.001829	0.001716	0.001012	0.001577	0.005508	0.001244	0.000980	0.001170	0.001215	0.001430	0.001590	0.004066	0.001417	0.001248	0.001715	0.006687	0.001480
A1-TS	0.131257	0.090206	0.095243	0.062827	0.075164	0.147075	0.081193	0.052363	0.068725	0.073631	0.073291	0.237854	0.126155	0.065640	0.068638	0.099068	0.139153	0.111706
A2-TS	0.025237	0.027465	0.030417	0.017375	0.021432	0.021602	0.020216	0.016839	0.020030	0.020733	0.020768	0.021547	0.021171	0.022033	0.021499	0.023702	0.023485	0.022798
A3-TS	0.001280	0.001078	0.001119	0.000886	0.001181	0.001329	0.001083	0.000948	0.001228	0.001306	0.001254	0.001321	0.001346	0.001184	0.001247	0.001244	0.001352	0.001177
A4-TS	0.003961	0.003335	0.003463	0.002742	0.003654	0.004113	0.003352	0.002935	0.003801	0.004041	0.003882	0.004089	0.004165	0.003664	0.003861	0.003848	0.004184	0.003644
A5-TS	0.004658	0.004123	0.004328	0.002691	0.003804	0.004882	0.003683	0.005903	0.003616	0.003730	0.003811	0.003702	0.004455	0.004086	0.003909	0.003832	0.005321	0.003727
A6-TS	0.005378	0.002419	0.002276	0.001344	0.002083	0.007181	0.001649	0.001301	0.001556	0.001616	0.001894	0.002101	0.005312	0.001876	0.001659	0.002269	0.008714	0.001964
A7-TS	0.006093	0.002710	0.002542	0.001499	0.002337	0.008159	0.001843	0.001451	0.001734	0.001800	0.002119	0.002355	0.006024	0.002099	0.001849	0.002541	0.009906	0.002193
A8-TS	0.017316	0.008889	0.008628	0.005173	0.007734	0.022359	0.006457	0.006348	0.006201	0.006435	0.007229	0.007773	0.017000	0.007289	0.006623	0.008341	0.026840	0.007443
A10-TS	0.035943	0.049582	0.027960	0.018136	0.058949	0.039624	0.026208	0.017061	0.021041	0.022290	0.046208	0.060159	0.034491	0.036348	0.021535	0.064939	0.038313	0.041625
A11-TS	0.006751	0.006301	0.006814	0.004694	0.007030	0.006837	0.006872	0.005817	0.007050	0.007299	0.007234	0.006401	0.006920	0.007691	0.007566	0.008013	0.007617	0.007965
A12-TS	0.022086	0.009825	0.009214	0.005434	0.008470	0.029578	0.006681	0.005262	0.006284	0.006525	0.007680	0.008536	0.021836	0.007607	0.006704	0.009212	0.035910	0.007950
A13-TS	0.006275	0.005615	0.005661	0.004345	0.009943	0.007649	0.010391	0.008501	0.009659	0.009702	0.009947	0.006375	0.007950	0.011920	0.010977	0.006130	0.006600	0.005805
A1-HTL	0.006931	0.004481	0.004689	0.003123	0.003773	0.007979	0.004201	0.002557	0.003381	0.003634	0.003635	0.013459	0.006731	0.003197	0.003354	0.004948	0.007375	0.005725
A2-HTL	0.001221	0.001360	0.001520	0.000843	0.000974	0.001001	0.000907	0.000757	0.000903	0.000937	0.000937	0.001011	0.000976	0.000983	0.000964	0.001098	0.001094	0.001050
A5-HTL	0.000315	0.000276	0.000289	0.000180	0.000255	0.000332	0.000247	0.000399	0.000242	0.000250	0.000256	0.000248	0.000301	0.000274	0.000262	0.000256	0.000362	0.000249
A6-HTL	0.000092	0.000050	0.000049	0.000030	0.000042	0.000116	0.000035	0.000028	0.000035	0.000036	0.000040	0.000043	0.000089	0.000039	0.000037	0.000047	0.000139	0.000042
A7-HTL	0.000046	0.000020	0.000019	0.000011	0.000018	0.000061	0.000014	0.000011	0.000013	0.000013	0.000016	0.000018	0.000045	0.000016	0.000014	0.000019	0.000074	0.000016
A8-HTL	0.000191	0.000107	0.000107	0.000065	0.000090	0.000239	0.000076	0.000062	0.000076	0.000079	0.000086	0.000093	0.000185	0.000085	0.000080	0.000102	0.000286	0.000092
A10-HTL	0.000731	0.000997	0.000571	0.000371	0.001195	0.000805	0.000536	0.000353	0.000431	0.000457	0.000929	0.001218	0.000702	0.000734	0.000442	0.001314	0.000779	0.000841
A11-HTL	0.000929	0.000867	0.000938	0.000646	0.000967	0.000941	0.000946	0.000800	0.000970	0.001004	0.000996	0.000881	0.000952	0.001058	0.001041	0.001103	0.001048	0.001096
A12-HTL	0.000564	0.000251	0.000235	0.000139	0.000216	0.000755	0.000170	0.000134	0.000160	0.000166	0.000196	0.000218	0.000557	0.000194	0.000171	0.000235	0.000916	0.000203
A1-HTS	0.028744	0.020192	0.021363	0.014242	0.016989	0.032129	0.018870	0.011610	0.015393	0.016551	0.016319	0.057280	0.027552	0.014375	0.015251	0.022562	0.030826	0.026032
A2-HTS	0.021588	0.023717	0.026361	0.014888	0.017878	0.018177	0.016817	0.014018	0.016702	0.017304	0.017322	0.018185	0.017785	0.018302	0.017895	0.019932	0.019809	0.019166
A4-HTS	0.003712	0.003125	0.003245	0.003424	0.003854	0.003141	0.002751	0.003562	0.003787	0.003638	0.003832	0.003903	0.003433	0.003433	0.003618	0.003606	0.003920	0.003414
A5-HTS	0.001203	0.001048	0.001098	0.000682	0.000966	0.001271	0.000932	0.001485	0.000915	0.000944	0.000966	0.000940	0.001151	0.001035	0.000989	0.000974	0.001392	0.000946
A6-HTS	0.003077	0.001386	0.001306	0.000771	0.001194	0.004107	0.000946	0.000746	0.000893	0.000927	0.001086	0.001205	0.003040	0.001076	0.000952	0.001301	0.004984	0.001127
A7-HTS	0.001828	0.000813	0.000763	0.000450	0.000701	0.002448	0.000553	0.000435	0.000520	0.000540	0.000636	0.000706	0.001807	0.000630	0.000555	0.000762	0.002972	0.000658
A8-HTS	0.011704	0.005799	0.005585	0.003336	0.005035	0.015259	0.004150	0.003900	0.003967	0.004118	0.004674	0.005064	0.011512	0.004694	0.004236	0.005441	0.018373	0.004818
A10-HTS	0.018358	0.025376	0.014277	0.009259	0.030114	0.020241	0.013378	0.008692	0.010740	0.011377	0.023652	0.030737	0.017616	0.018595	0.010992	0.033185	0.019571	0.021286
A11-HTS	0.002230	0.002081	0.002251	0.001550	0.002322	0.002258	0.002270	0.001921	0.002329	0.002411	0.002389	0.002114	0.002285	0.002540	0.002499	0.002647	0.002516	0.002631
A12-HTS	0.019345	0.008605	0.008070	0.004759	0.007419	0.025906	0.005852	0.004608	0.005504	0.005715	0.006726	0.007477	0.019126	0.006663	0.005872	0.008068	0.031452	0.006963

	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A13-HTS	0.002144	0.001919	0.001935	0.001485	0.003398	0.002614	0.003551	0.002905	0.003301	0.003315	0.003399	0.002179	0.002717	0.004073	0.003751	0.002095	0.002255	0.001984
A1-LL	0.000863	0.000623	0.000661	0.000444	0.000522	0.000958	0.000594	0.000361	0.000480	0.000517	0.000506	0.001881	0.000825	0.000444	0.000475	0.000697	0.000933	0.000818
A2-LL	0.000372	0.000410	0.000458	0.000256	0.000306	0.000309	0.000281	0.000235	0.000279	0.000289	0.000289	0.000315	0.000301	0.000304	0.000298	0.000341	0.000337	0.000323
A5-LL	0.000095	0.000088	0.000092	0.000057	0.000081	0.000097	0.000079	0.000131	0.000078	0.000080	0.000082	0.000079	0.000090	0.000088	0.000084	0.000081	0.000104	0.000079
A6-LL	0.000046	0.000029	0.000030	0.000018	0.000024	0.000055	0.000021	0.000018	0.000022	0.000023	0.000024	0.000025	0.000044	0.000024	0.000023	0.000028	0.000065	0.000026
A7-LL	0.000030	0.000014	0.000013	0.000007	0.000012	0.000041	0.000009	0.000007	0.000009	0.000009	0.000011	0.000012	0.000030	0.000010	0.000009	0.000013	0.000050	0.000011
A8-LL	0.000115	0.000073	0.000075	0.000046	0.000061	0.000137	0.000053	0.000044	0.000054	0.000057	0.000060	0.000064	0.000110	0.000059	0.000057	0.000070	0.000162	0.000065
A10-LL	0.000254	0.000337	0.000202	0.000131	0.000408	0.000278	0.000190	0.000128	0.000154	0.000163	0.000314	0.000415	0.000244	0.000252	0.000158	0.000446	0.000269	0.000287
A11-LL	0.000372	0.000347	0.000375	0.000258	0.000387	0.000376	0.000378	0.000320	0.000388	0.000402	0.000398	0.000352	0.000381	0.000423	0.000416	0.000441	0.000419	0.000438
A12-LL	0.000152	0.000068	0.000064	0.000037	0.000058	0.000204	0.000046	0.000036	0.000043	0.000045	0.000053	0.000059	0.000151	0.000052	0.000046	0.000064	0.000248	0.000055
A1-LS	0.006943	0.005106	0.005435	0.003605	0.004320	0.007595	0.004681	0.002929	0.003881	0.004172	0.004091	0.012918	0.006586	0.003616	0.003849	0.005764	0.007442	0.006541
A2-LS	0.004137	0.004454	0.004924	0.002831	0.003623	0.003583	0.003343	0.002790	0.003293	0.003410	0.003415	0.003627	0.003503	0.003619	0.003533	0.003981	0.003877	0.003751
A5-LS	0.000504	0.000451	0.000474	0.000295	0.000418	0.000526	0.000406	0.000660	0.000398	0.000410	0.000419	0.000406	0.000482	0.000450	0.000431	0.000419	0.000571	0.000408
A6-LS	0.001226	0.000550	0.000517	0.000305	0.000474	0.001639	0.000375	0.000295	0.000353	0.000367	0.000430	0.000478	0.001212	0.000426	0.000377	0.000516	0.001989	0.000446
A7-LS	0.000914	0.000407	0.000381	0.000225	0.000350	0.001224	0.000276	0.000218	0.000260	0.000270	0.000318	0.000353	0.000904	0.000315	0.000277	0.000381	0.001486	0.000329
A8-LS	0.005434	0.002476	0.002336	0.001382	0.002139	0.007237	0.001705	0.001413	0.001610	0.001671	0.001950	0.002154	0.005367	0.001939	0.001718	0.002321	0.008770	0.002015
A10-LS	0.003418	0.004677	0.002660	0.001727	0.005606	0.003767	0.002497	0.001637	0.002004	0.002123	0.004357	0.005717	0.003280	0.003433	0.002051	0.006168	0.003642	0.003940
A11-LS	0.005203	0.004856	0.005251	0.003618	0.005417	0.005269	0.005296	0.004483	0.005433	0.005625	0.005575	0.004933	0.005333	0.005927	0.005831	0.006175	0.005870	0.006138
A12-LS	0.002178	0.000969	0.000909	0.000536	0.000835	0.002917	0.000659	0.000519	0.000620	0.000643	0.000757	0.000842	0.002154	0.000750	0.000661	0.000908	0.003541	0.000784
A1-OL	0.018630	0.011918	0.012447	0.008323	0.010192	0.021577	0.011411	0.006823	0.009032	0.009711	0.009719	0.036525	0.018148	0.008530	0.008950	0.013256	0.019881	0.015461
A2-OL	0.003073	0.003459	0.003888	0.002120	0.002383	0.002457	0.002163	0.001812	0.002155	0.002242	0.002238	0.002526	0.002383	0.002321	0.002291	0.002723	0.002690	0.002559
A3-OL	0.001482	0.001248	0.001296	0.001026	0.001367	0.001539	0.001254	0.001098	0.001422	0.001512	0.001453	0.001530	0.001558	0.001371	0.001444	0.001440	0.001565	0.001363
A5-OL	0.000504	0.000451	0.000474	0.000295	0.000418	0.000526	0.000406	0.000660	0.000398	0.000410	0.000419	0.000406	0.000482	0.000450	0.000431	0.000440	0.000571	0.000408
A6-OL	0.000206	0.000096	0.000091	0.000054	0.000082	0.000272	0.000066	0.000052	0.000063	0.000065	0.000075	0.000083	0.000203	0.000075	0.000067	0.000090	0.000330	0.000079
A7-OL	0.000228	0.000102	0.000095	0.000056	0.000088	0.000306	0.000069	0.000054	0.000065	0.000067	0.000079	0.000088	0.000226	0.000079	0.000069	0.000095	0.000371	0.000082
A8-OL	0.000511	0.000432	0.000450	0.000279	0.000404	0.000552	0.000390	0.000645	0.000379	0.000390	0.000402	0.000389	0.000493	0.000433	0.000411	0.000400	0.000607	0.000387
A9-OL	0.069604	0.054755	0.058534	0.041422	0.042519	0.077845	0.060795	0.032549	0.044604	0.048479	0.045813	0.052492	0.066940	0.038397	0.043127	0.059841	0.080168	0.080852
A10-OL	0.010241	0.014423	0.007950	0.005148	0.016804	0.011301	0.007426	0.004738	0.005964	0.006317	0.013455	0.017178	0.009823	0.010533	0.006105	0.018573	0.010928	0.012001
A11-OL	0.000805	0.000752	0.000813	0.000560	0.000838	0.000815	0.000820	0.000694	0.000841	0.000870	0.000863	0.000763	0.000825	0.000917	0.000902	0.000956	0.000908	0.000950
A12-OL	0.001447	0.000644	0.000604	0.000356	0.000555	0.001938	0.000438	0.000345	0.000412	0.000427	0.000503	0.000559	0.001431	0.000498	0.000439	0.000604	0.002353	0.000521
A1-OS	0.014162	0.010166	0.010793	0.007129	0.008451	0.015616	0.009161	0.005930	0.007795	0.008354	0.008253	0.026403	0.013520	0.007396	0.007780	0.011214	0.015084	0.012666
A2-OS	0.008604	0.009541	0.010658	0.005928	0.006958	0.007091	0.006414	0.005361	0.006372	0.006614	0.006613	0.007204	0.006908	0.006929	0.006802	0.007833	0.007738	0.007424
A5-OS	0.002597	0.002290	0.002402	0.001493	0.002119	0.002731	0.002053	0.003320	0.002011	0.002074	0.002122	0.002058	0.002487	0.002278	0.002176	0.002127	0.002977	0.002068
A6-OS	0.000324	0.000155	0.000149	0.000089	0.000133	0.000425	0.000107	0.000085	0.000103	0.000107	0.000123	0.000135	0.000319	0.000121	0.000109	0.000146	0.000514	0.000128
A7-OS	0.000457	0.000203	0.000191	0.000112	0.000175	0.000612	0.000138	0.000109	0.000130	0.000135	0.000159	0.000177	0.000452	0.000157	0.000139	0.000191	0.000743	0.000164
A8-OS	0.002338	0.001157	0.001113	0.000665	0.001007	0.003051	0.000831	0.000793	0.000793	0.000822	0.000934	0.001011	0.002301	0.000940	0.000847	0.001085	0.003672	0.000960
A10-OS	0.006229	0.008514	0.004836	0.003141	0.010246	0.006871	0.004544	0.002982	0.003640	0.003857	0.007928	0.010449	0.005980	0.006238	0.003722	0.011274	0.006641	0.007179
A11-OS	0.002465	0.002301	0.002488	0.001714	0.002567	0.002496	0.002509	0.002124	0.002574	0.002665	0.002642	0.002337	0.002527	0.002808	0.002763	0.002926	0.002781	0.002908
A12-OS	0.006245	0.002778	0.002605	0.001536	0.002395	0.008363	0.001889	0.001488	0.001777	0.001845	0.002171	0.002414	0.006174	0.002151	0.001896	0.002605	0.010154	0.002248
A14	0.110980	0.094199	0.101669	0.068278	0.072293	0.114658	0.095875	0.056056	0.074500	0.080095	0.076787	0.086086	0.103024	0.068233	0.073837	0.100093	0.122802	0.136275
A15	0.372787	0.431317	0.377679	0.251750	0.367934	0.395628	0.279909	0.297063	0.352144	0.361426	0.369373	0.336995	0.377158	0.414020	0.384307	0.363162	0.394959	0.377999
C-1	0.318323	0.253231	0.271152	0.189648	0.208816	0.309332	0.276194	0.150437	0.204753	0.222017	0.210614	1.104259	0.304191	0.178805	0.199052	0.284995	0.362963	0.371486
C-2	0.249399	0.083991	0.077117	0.044250	0.074617	0.323557	0.051206	0.039858	0.047816	0.049939	0.064590	0.077040	0.254818	0.060117	0.050409	0.083346	0.241079	0.066513



	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
C-3	0.260166	0.236697	0.254403	0.188133	0.186028	0.238308	0.156478	0.146446	0.204537	0.223539	0.206087	0.237291	0.243431	0.168009	0.195229	0.268283	0.270961	0.257713
C-4	0.067480	0.028914	0.029409	0.016688	0.023362	0.121815	0.074851	0.014945	0.017918	0.018684	0.021164	0.024348	0.069693	0.020729	0.018951	0.026215	0.115195	0.097655
C-5	0.047678	0.039626	0.042658	0.029464	0.030463	0.050194	0.038046	0.022559	0.030910	0.033596	0.031710	0.149631	0.044561	0.026582	0.029886	0.045619	0.053467	0.054660
C-6	0.008833	0.009437	0.010535	0.006122	0.005844	0.007199	0.005368	0.004600	0.005911	0.006284	0.006103	0.007456	0.007020	0.005734	0.006003	0.008314	0.008409	0.008304
C-7	0.055377	0.038340	0.041254	0.025791	0.026703	0.063596	0.099123	0.019670	0.025965	0.027875	0.027586	0.030400	0.054691	0.024482	0.025818	0.038395	0.051897	0.086547
C-8	0.044155	0.036489	0.039282	0.026340	0.037552	0.046170	0.036706	0.021642	0.028735	0.030885	0.029728	0.040944	0.041193	0.026420	0.028494	0.046727	0.048600	0.051997
C-9	0.001160	0.001163	0.001276	0.000781	0.001211	0.001128	0.001222	0.000999	0.001166	0.001189	0.001213	0.001099	0.001122	0.001365	0.001290	0.001237	0.001212	0.001235
C-10	0.045696	0.046170	0.050723	0.031995	0.034699	0.040126	0.031965	0.027750	0.035563	0.037708	0.036487	0.039617	0.039941	0.034821	0.036328	0.047441	0.046791	0.047115
C-11	0.007291	0.002549	0.002357	0.001377	0.002282	0.008647	0.014414	0.001252	0.001511	0.001581	0.001999	0.002371	0.006747	0.001860	0.001588	0.002543	0.008961	0.027048
C-12	0.161389	0.162869	0.179754	0.113509	0.128922	0.142183	0.117743	0.101827	0.129563	0.136944	0.132631	0.141482	0.142274	0.128538	0.133241	0.174979	0.166924	0.172576
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.195951	0.228078	0.258152	0.137354	0.135201	0.149216	0.130418	0.108808	0.132575	0.137966	0.137659	0.148029	0.145286	0.142499	0.140786	0.159092	0.165750	0.158231
C-15	0.044705	0.044837	0.047724	0.030625	0.045624	0.044015	0.045591	0.037657	0.044747	0.045961	0.046268	0.041488	0.043949	0.050806	0.048763	0.047780	0.047303	0.047790
C-16	0.005276	0.005301	0.005815	0.003562	0.005146	0.005022	0.005116	0.004209	0.004985	0.005117	0.005185	0.004960	0.004975	0.005681	0.005441	0.004924	0.005153	0.004823
C-17	0.017739	0.012206	0.012792	0.008937	0.032343	0.019823	0.013615	0.012595	0.009911	0.010700	0.010464	0.031909	0.017308	0.009032	0.009730	0.033439	0.018814	0.015035
C-18	0.026300	0.022143	0.022992	0.018206	0.024263	0.027306	0.022253	0.019488	0.025238	0.026833	0.025777	0.027149	0.027655	0.024326	0.025632	0.025551	0.027777	0.024192
C-19	0.268113	0.119263	0.111852	0.065964	0.102823	0.359055	0.081105	0.063872	0.076286	0.079206	0.093225	0.103626	0.265077	0.092349	0.081385	0.111826	0.435923	0.096512
C-20	0.039366	0.039743	0.043843	0.027645	0.032247	0.035087	0.030411	0.026143	0.032803	0.034489	0.033638	0.034577	0.035170	0.033400	0.034112	0.038570	0.038856	0.037920
C-21	0.026089	0.026548	0.027975	0.017453	0.025573	0.025596	0.025590	0.047587	0.024705	0.025342	0.025740	0.024173	0.025090	0.028362	0.026990	0.024342	0.026146	0.024057
C-22	0.158123	0.223761	0.122737	0.079440	0.259418	0.174524	0.114532	0.072735	0.092012	0.097459	0.208801	0.265290	0.151657	0.163303	0.094202	0.286937	0.168771	0.185809
C-23	0.243696	0.236975	0.258967	0.168380	0.240810	0.235702	0.236332	0.198415	0.239343	0.247408	0.246458	0.227487	0.237441	0.263234	0.257593	0.252667	0.252220	0.249014
C-24	0.056602	0.056912	0.062744	0.038156	0.064825	0.056489	0.066922	0.054394	0.062204	0.062814	0.064496	0.053370	0.056573	0.075337	0.070005	0.057677	0.057884	0.057631
C-25	0.078461	0.073233	0.079195	0.054556	0.081697	0.079459	0.079869	0.067603	0.081939	0.084824	0.084077	0.074392	0.080420	0.089382	0.087932	0.093131	0.088524	0.092569
C-26	0.011940	0.010684	0.010773	0.008268	0.018920	0.014556	0.019772	0.016175	0.018380	0.018461	0.018928	0.012131	0.015128	0.022682	0.020888	0.011665	0.012559	0.011047
C-27	0.072489	0.137431	0.055968	0.045214	0.062299	0.103437	0.076655	0.044254	0.050596	0.051204	0.058419	0.056138	0.083145	0.075449	0.056709	0.052819	0.084867	0.071350
Ld-BL	0.064689	0.044526	0.046938	0.031096	0.037322	0.072640	0.040608	0.026303	0.034069	0.036519	0.036330	0.120475	0.062266	0.032460	0.033989	0.048975	0.068820	0.055513
Ld-BS	0.113517	0.078527	0.083012	0.054764	0.065386	0.125075	0.070771	0.046726	0.059995	0.064263	0.063841	0.206114	0.107619	0.057285	0.059950	0.086133	0.119356	0.097120
Ld-CL	0.018898	0.012288	0.012838	0.008583	0.471177	0.025115	0.098872	0.161279	0.009422	0.010112	0.010118	0.036773	0.019382	0.008968	0.009374	0.013537	0.020197	0.015673
Ld-CS	0.039012	0.026742	0.028191	0.018633	0.022393	0.043869	0.024368	0.015916	0.020399	0.021859	0.021765	0.072149	0.037547	0.019475	0.020365	0.480894	0.042194	0.108292
Ld-TL	0.022897	0.015079	0.015803	0.010520	0.012718	0.026196	0.014075	0.008873	0.011500	0.012341	0.012331	0.044049	0.022212	0.010937	0.011444	0.016591	0.024382	0.019077
Ld-TS	0.060406	0.041732	0.044031	0.029020	0.034868	0.067607	0.037531	0.024807	0.031873	0.034122	0.034008	0.108563	0.058054	0.030574	0.031887	0.045718	0.064095	0.051392
Ld-HTL	0.003289	0.002140	0.002240	0.001489	0.001804	0.003779	0.002003	0.001256	0.001619	0.001738	0.001740	0.006326	0.003192	0.001538	0.001609	0.002354	0.003502	0.002715
Ld-HTS	0.011883	0.008387	0.008867	0.005902	0.007072	0.013268	0.007823	0.004945	0.006405	0.006881	0.006796	0.023456	0.011388	0.006013	0.006359	0.009342	0.012756	0.010743
Ld-LL	0.000420	0.000306	0.000325	0.000217	0.000258	0.000465	0.000291	0.000190	0.000237	0.000255	0.000250	0.000895	0.000401	0.000222	0.000236	0.000340	0.000454	0.000396
Ld-LS	0.002270	0.001686	0.001791	0.001184	0.001434	0.002478	0.001541	0.001026	0.001288	0.001382	0.001360	0.004137	0.002154	0.001215	0.001283	0.001890	0.002437	0.002130
Ld-OL	0.008954	0.005798	0.006057	0.004046	0.004969	0.010329	0.005524	0.003395	0.004416	0.004743	0.004748	0.017320	0.008714	0.004191	0.004387	0.006417	0.009547	0.007438
Ld-OS	0.006946	0.005076	0.005385	0.003535	0.004246	0.007622	0.004554	0.003250	0.003921	0.004188	0.004152	0.012475	0.006622	0.003783	0.003941	0.005522	0.007418	0.006173
Ld-LSD	0.005325	0.003683	0.003891	0.002574	0.003073	0.005962	0.003347	0.002131	0.002805	0.003009	0.002987	0.009928	0.005114	0.002663	0.002795	0.019925	0.005663	0.004609
Lb-BL	0.024998	0.017869	0.017319	0.010468	0.016110	0.029245	0.013341	0.010425	0.012410	0.012935	0.014820	0.019461	0.023809	0.014511	0.013137	0.017997	0.033312	0.016172
Lb-BS	0.502098	0.723951	1.075439	0.248360	0.083714	0.153481	0.065486	0.052111	0.060981	0.063610	0.075624	0.100134	0.123682	0.072895	0.064451	0.093200	0.175507	0.080820
Lb-CL	0.010182	0.007192	0.006938	0.004308	0.018243	0.082148	0.008717	0.076789	0.505769	0.505954	0.034517	0.008769	0.168378	0.226475	0.724536	0.007611	0.013857	0.006806
Lb-CS	0.053475	0.037926	0.035092	0.021524	0.035382	0.063632	0.027814	0.021403	0.025564	0.026705	0.032027	0.045721	0.051469	0.030588	0.026939	0.133934	0.266446	0.045507
Lb-TL	0.013193	0.009537	0.009050	0.005814	0.009039	0.015455	0.007846	0.005837	0.007055	0.007411	0.008433	0.014646	0.012864	0.007990	0.007348	0.010400	0.016642	0.009859

	A10-BS	A11-BS	A12-BS	A13-BS	A1-CL	A2-CL	A3-CL	A5-CL	A6-CL	A7-CL	A8-CL	A9-CL	A10-CL	A11-CL	A12-CL	A1-CS	A2-CS	A3-CS
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Lb-TS	0.097572	0.073426	0.065127	0.041479	0.072698	0.115456	0.055700	0.042663	0.050964	0.053366	0.065706	0.096707	0.095276	0.061573	0.053442	0.080935	0.126850	0.069935
Lb-HTL	0.001384	0.001009	0.000962	0.000606	0.000980	0.001623	0.000805	0.000639	0.000769	0.000801	0.000914	0.001118	0.001349	0.000899	0.000816	0.001102	0.001850	0.000988
Lb-HTS	0.058063	0.044242	0.038780	0.024186	0.043506	0.068818	0.032062	0.024595	0.029438	0.030750	0.038862	0.051433	0.056245	0.036493	0.031027	0.047665	0.077168	0.039808
Lb-LL	0.000368	0.000324	0.000313	0.000197	0.000324	0.000399	0.000269	0.000217	0.000255	0.000265	0.000301	0.000371	0.000354	0.000299	0.000272	0.000357	0.000438	0.000319
Lb-LS	0.017266	0.012936	0.012306	0.007896	0.012946	0.020120	0.010774	0.008565	0.010256	0.010681	0.012109	0.014878	0.016957	0.011937	0.010875	0.014393	0.022711	0.012950
Lb-OL	0.002767	0.002546	0.002581	0.001603	0.002528	0.002896	0.002288	0.001843	0.002185	0.002252	0.002444	0.002494	0.002655	0.002556	0.002364	0.002685	0.003151	0.002482
Lb-OS	0.013501	0.009201	0.008659	0.005346	0.008544	0.016209	0.006881	0.005527	0.006415	0.006700	0.007820	0.010787	0.013059	0.007548	0.006764	0.009551	0.018507	0.008468
Lb-HRD	0.293720	0.117560	0.119999	0.405282	0.237284	0.271397	0.104717	0.239250	0.490403	0.585893	0.406324	0.219720	0.445512	0.122862	0.365416	0.240112	0.176532	0.137915
K-BL	0.037379	0.034371	0.033106	0.021252	0.031866	0.038831	0.026875	0.020807	0.024861	0.026258	0.029673	0.049433	0.035079	0.027459	0.025606	0.036772	0.039239	0.034211
K-BS	0.109500	0.244155	0.069259	0.201716	0.048754	0.063043	0.045001	0.038198	0.043232	0.045161	0.046373	0.068131	0.057333	0.046680	0.045557	0.056070	0.067380	0.054221
K-CL	0.015560	0.012388	0.012993	0.008716	0.153095	0.113855	0.657996	0.350698	0.056599	0.011718	0.550697	0.034432	0.066583	0.680075	0.011588	0.013770	0.017307	0.014267
K-CS	0.016069	0.012853	0.013197	0.008138	0.010969	0.017350	0.010165	0.008527	0.009328	0.009804	0.010415	0.019657	0.014989	0.010066	0.009705	0.091035	0.141856	0.637694
K-TL	0.007661	0.006271	0.006199	0.004242	0.006174	0.008371	0.005632	0.004603	0.005381	0.005680	0.006029	0.009695	0.007558	0.005710	0.005549	0.007081	0.008583	0.006913
K-TS	0.029089	0.024209	0.022153	0.014661	0.024734	0.032734	0.020227	0.016427	0.018697	0.019616	0.022930	0.036395	0.028625	0.021644	0.019527	0.027207	0.033778	0.024500
K-HTL	0.001464	0.001327	0.001389	0.000875	0.001217	0.001483	0.001147	0.000964	0.001094	0.001142	0.001185	0.001806	0.001377	0.001189	0.001153	0.001408	0.001537	0.001391
K-HTS	0.014135	0.011657	0.011018	0.007289	0.012370	0.015993	0.010327	0.008798	0.010061	0.010451	0.011743	0.012572	0.014108	0.011745	0.010724	0.012647	0.017410	0.011125
K-LL	0.000488	0.000472	0.000493	0.000305	0.000438	0.000479	0.000391	0.000341	0.000387	0.000402	0.000422	0.000465	0.000452	0.000432	0.000412	0.000493	0.000526	0.000462
K-LS	0.004470	0.003582	0.003583	0.002279	0.003567	0.004991	0.003084	0.002647	0.003042	0.003155	0.003415	0.003443	0.004358	0.003488	0.003254	0.003969	0.005709	0.003634
K-OL	0.010645	0.011420	0.008741	0.005795	0.012064	0.011546	0.008023	0.005698	0.006926	0.007334	0.010561	0.015386	0.010270	0.009023	0.007095	0.013631	0.011375	0.011074
K-OS	0.007139	0.006991	0.006858	0.004212	0.006581	0.007208	0.005415	0.004925	0.005217	0.005428	0.006128	0.007188	0.006611	0.006071	0.005543	0.007338	0.007803	0.006543
B-L	0.134889	0.104905	0.106397	0.068098	0.093649	0.148181	0.089427	0.064501	0.079325	0.083786	0.089120	0.196611	0.128575	0.084063	0.081696	0.112420	0.148692	0.112707
B-S	0.775230	1.076910	1.260125	0.562952	0.242661	0.388329	0.211140	0.179284	0.237883	0.258040	0.250300	0.414657	0.355702	0.210996	0.231056	0.277944	0.397188	0.261343
C-L	0.050519	0.037008	0.038373	0.025003	0.647404	0.227201	0.770744	0.592609	0.576362	0.532488	0.600132	0.088148	0.259934	0.920706	0.750465	0.048561	0.057185	0.041775
C-S	0.145545	0.098229	0.098506	0.093080	0.101223	0.159240	0.082559	0.076924	0.111481	0.123745	0.112734	0.166773	0.155012	0.083320	0.102488	0.736606	0.475218	0.811698
T-L	0.046129	0.033446	0.033906	0.022167	0.030562	0.052272	0.030304	0.021513	0.026404	0.027905	0.029375	0.070544	0.044858	0.027732	0.027161	0.036054	0.051746	0.037798
T-S	0.276016	0.181660	0.175488	0.200828	0.207117	0.298218	0.153138	0.157443	0.243769	0.275045	0.242723	0.309962	0.311106	0.159759	0.214934	0.227054	0.280983	0.190781
HT-L	0.007413	0.005820	0.006085	0.003837	0.005386	0.008098	0.005383	0.004016	0.004802	0.005014	0.005212	0.010402	0.007126	0.005233	0.005066	0.005985	0.008074	0.006196
HT-S	0.126361	0.084741	0.080078	0.092047	0.098702	0.137249	0.069500	0.073403	0.113272	0.127513	0.114393	0.119908	0.142858	0.076594	0.100474	0.104167	0.134190	0.083188
Lo-L	0.001586	0.001442	0.001510	0.000924	0.001368	0.001636	0.001320	0.001039	0.001202	0.001244	0.001312	0.002013	0.001494	0.001367	0.001293	0.001437	0.001690	0.001420
Lo-S	0.058567	0.034188	0.034319	0.056807	0.046899	0.059605	0.030359	0.040821	0.070373	0.081211	0.063834	0.048827	0.074074	0.034015	0.058329	0.048470	0.052058	0.035949
O-L	0.025331	0.022517	0.020401	0.013272	0.022265	0.027754	0.018646	0.013116	0.016097	0.016961	0.020433	0.038808	0.024467	0.018730	0.016663	0.028157	0.026977	0.023589
O-S	0.055630	0.037212	0.037889	0.046882	0.044159	0.057091	0.032475	0.037375	0.058061	0.065695	0.054890	0.052521	0.064802	0.035348	0.050815	0.045283	0.052525	0.036587
COM	0.052184	0.051544	0.056515	0.035490	0.054528	0.051071	0.054788	0.045172	0.053157	0.054367	0.055005	0.049257	0.051126	0.061229	0.058404	0.055025	0.053861	0.053450
FA1	0.101373	0.111185	0.124213	0.066993	0.114231	0.095603	0.120692	0.095522	0.105591	0.105049	0.110950	0.092131	0.093815	0.135872	0.122075	0.080478	0.088626	0.079061
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.045524	0.049930	0.055780	0.030085	0.051298	0.042932	0.054199	0.042896	0.047418	0.047174	0.049825	0.041373	0.042129	0.061016	0.054820	0.036140	0.039799	0.035504
FA4	0.116649	0.124679	0.139337	0.080305	0.135174	0.111412	0.141274	0.114496	0.129248	0.129681	0.133866	0.101883	0.112425	0.160165	0.147170	0.107971	0.109702	0.107082
FA5	0.027649	0.028465	0.031542	0.019031	0.029322	0.026339	0.029830	0.024518	0.028482	0.028965	0.029439	0.024831	0.026483	0.033527	0.031635	0.025557	0.026456	0.025131
FA6	0.030065	0.034302	0.038819	0.020834	0.021730	0.023644	0.021244	0.017556	0.021195	0.021971	0.022013	0.024005	0.022982	0.023154	0.022682	0.023255	0.025135	0.023029
FA7	0.045524	0.049930	0.055780	0.030085	0.051298	0.042932	0.054199	0.042896	0.047418	0.047174	0.049825	0.041373	0.042129	0.061016	0.054820	0.036140	0.039799	0.035504
FA8	0.182046	0.182896	0.200620	0.122903	0.177541	0.173259	0.176532	0.145213	0.172006	0.176533	0.178913	0.171137	0.171643	0.195994	0.187728	0.169884	0.177790	0.166423
FA9	0.005028	0.004966	0.005445	0.003419	0.005253	0.004920	0.005278	0.004352	0.005121	0.005238	0.005299	0.004745	0.004926	0.005899	0.005627	0.005301	0.005189	0.005149

	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
A1-BL	0.079587	0.098773	0.103619	0.102766	0.138945	0.100228	0.105270	0.086225	0.151071	0.101519	0.074529	0.061300	0.067753	0.074529	0.081067	0.260716	0.099739	0.076938
A2-BL	0.022601	0.027258	0.029056	0.028379	0.028359	0.027795	0.029881	0.020510	0.024051	0.019529	0.018880	0.016185	0.017163	0.018880	0.019740	0.026613	0.019095	0.018936
A3-BL	0.005600	0.007046	0.007113	0.007062	0.007278	0.006686	0.007009	0.013225	0.010116	0.014204	0.017348	0.011835	0.015771	0.017348	0.014158	0.007421	0.008721	0.015160
A5-BL	0.006254	0.003143	0.003316	0.003274	0.003795	0.003280	0.003384	0.003827	0.004352	0.003952	0.004511	0.008205	0.004101	0.004511	0.003995	0.003091	0.003356	0.004196
A6-BL	0.000423	0.000515	0.000547	0.000570	0.001413	0.000610	0.000561	0.000556	0.001922	0.000468	0.000456	0.000363	0.000414	0.000456	0.000547	0.000599	0.001041	0.000542
A7-BL	0.000411	0.000500	0.000531	0.000554	0.001397	0.000594	0.000544	0.000542	0.001908	0.000454	0.000441	0.000351	0.000401	0.000441	0.000533	0.000586	0.001029	0.000528
A8-BL	0.002052	0.001654	0.001752	0.001784	0.003470	0.001858	0.001793	0.001849	0.004527	0.001705	0.001794	0.002299	0.001631	0.001794	0.001864	0.001791	0.002663	0.001893
A9-BL	0.079053	0.098845	0.102322	0.100850	0.113959	0.096508	0.102876	0.080164	0.128772	0.124256	0.074805	0.062395	0.068004	0.074805	0.079924	0.084364	0.085033	0.075251
A10-BL	0.011987	0.014512	0.015253	0.020826	0.019563	0.025584	0.015519	0.031827	0.021347	0.016893	0.013030	0.010612	0.011846	0.013030	0.030259	0.032962	0.014518	0.027460
A11-BL	0.003410	0.004214	0.004509	0.004378	0.004077	0.004258	0.004649	0.003107	0.003343	0.002990	0.003179	0.002525	0.002890	0.003179	0.003146	0.003200	0.002719	0.003060
A12-BL	0.004517	0.005497	0.005837	0.006089	0.015368	0.006535	0.005986	0.005964	0.020992	0.004999	0.004852	0.003863	0.004411	0.004852	0.005858	0.006441	0.011321	0.005809
A1-BS	0.130320	0.161706	0.169805	0.168210	0.223448	0.164012	0.172642	0.139441	0.240164	0.162613	0.120793	0.099451	0.109812	0.120793	0.131232	0.410790	0.159692	0.124501
A2-BS	0.077715	0.094196	0.100455	0.098087	0.097551	0.096096	0.103341	0.070123	0.082321	0.066855	0.065282	0.055380	0.059347	0.065282	0.068143	0.089932	0.065608	0.065417
A3-BS	0.000587	0.000738	0.000745	0.000740	0.000762	0.000700	0.000734	0.001386	0.001060	0.001488	0.001817	0.001240	0.001652	0.001817	0.001483	0.000777	0.000914	0.001588
A5-BS	0.015560	0.007827	0.008259	0.008154	0.009455	0.008170	0.008428	0.009527	0.010845	0.009836	0.011229	0.020411	0.010208	0.011229	0.009945	0.007699	0.008360	0.010446
A6-BS	0.001270	0.001546	0.001642	0.001709	0.004238	0.001829	0.001683	0.001668	0.005767	0.001404	0.001367	0.001088	0.001243	0.001367	0.001640	0.001798	0.003122	0.001626
A7-BS	0.001437	0.001749	0.001857	0.001937	0.004890	0.002079	0.001905	0.001898	0.006679	0.001590	0.001544	0.001229	0.001404	0.001544	0.001864	0.002050	0.003602	0.001848
A8-BS	0.006723	0.005770	0.006115	0.006263	0.013054	0.006573	0.006260	0.006441	0.017282	0.005827	0.006042	0.007300	0.005492	0.006042	0.006461	0.006377	0.009920	0.006533
A10-BS	0.021084	0.025275	0.026554	0.035862	0.033996	0.043782	0.027008	0.054701	0.037153	0.029699	0.023002	0.018960	0.020911	0.023002	0.051732	0.057193	0.025324	0.047059
A11-BS	0.006882	0.008505	0.009099	0.008835	0.008228	0.008594	0.009383	0.006270	0.006746	0.006034	0.006416	0.005096	0.005833	0.006416	0.006349	0.005488	0.006175	
A12-BS	0.016177	0.019688	0.020908	0.021809	0.055044	0.023408	0.021441	0.021361	0.075190	0.017904	0.017381	0.013838	0.015801	0.017381	0.020982	0.023072	0.040551	0.020808
A13-BS	0.001470	0.001841	0.001870	0.001854	0.001910	0.001814	0.001852	0.002367	0.002170	0.002414	0.002747	0.002015	0.002497	0.002747	0.002463	0.001872	0.001954	0.002556
A1-CL	0.020893	0.025950	0.027117	0.027019	0.039041	0.026378	0.027466	0.023684	0.044203	0.028915	0.020292	0.016642	0.018448	0.020292	0.022197	0.079162	0.028460	0.021085
A2-CL	0.006430	0.007736	0.008244	0.008054	0.008082	0.007879	0.008476	0.005631	0.006776	0.005299	0.004986	0.004394	0.004533	0.004986	0.005354	0.007659	0.005337	0.005073
A3-CL	0.002080	0.002617	0.002642	0.002623	0.002703	0.002483	0.002603	0.004912	0.003757	0.005276	0.006443	0.004396	0.005858	0.006443	0.005259	0.002756	0.003239	0.005631
A5-CL	0.004748	0.002397	0.002529	0.002499	0.002932	0.002506	0.002581	0.002917	0.003378	0.003008	0.003430	0.006222	0.003119	0.003430	0.003044	0.002363	0.002584	0.003196
A6-CL	0.000093	0.000113	0.000120	0.000124	0.000301	0.000133	0.000123	0.000121	0.000408	0.000102	0.000100	0.000079	0.000091	0.000100	0.000119	0.000130	0.000222	0.000118
A7-CL	0.000328	0.000400	0.000425	0.000443	0.001118	0.000475	0.000435	0.000434	0.001527	0.000364	0.000353	0.000281	0.000321	0.000353	0.000426	0.000468	0.000823	0.000422
A8-CL	0.001214	0.000996	0.001055	0.001074	0.002085	0.001118	0.001080	0.001107	0.002716	0.001019	0.001071	0.001350	0.000974	0.001071	0.001116	0.001076	0.001597	0.001132
A9-CL	0.039214	0.049029	0.050762	0.050032	0.056601	0.047886	0.051045	0.039735	0.063790	0.062329	0.037069	0.030919	0.033699	0.037069	0.039615	0.041821	0.042146	0.037298
A10-CL	0.002778	0.003326	0.003494	0.004721	0.004479	0.005765	0.003553	0.007203	0.004894	0.003904	0.003011	0.002491	0.002737	0.003011	0.006804	0.007550	0.003333	0.006186
A11-CL	0.005704	0.007049	0.007542	0.007322	0.006820	0.007123	0.007777	0.005196	0.005591	0.005001	0.005318	0.004223	0.004835	0.005318	0.005262	0.005353	0.004549	0.005118
A12-CL	0.001749	0.002129	0.002261	0.002358	0.005951	0.002531	0.002318	0.002310	0.008130	0.001936	0.001879	0.001496	0.001708	0.001879	0.002269	0.002495	0.004384	0.002250
A1-CS	0.048424	0.060095	0.063044	0.062539	0.084909	0.061009	0.064049	0.052558	0.092435	0.061811	0.045404	0.037334	0.041277	0.045404	0.049406	0.158462	0.060965	0.046895
A2-CS	0.019260	0.023377	0.024931	0.024340	0.024140	0.023869	0.025649	0.018152	0.020695	0.017519	0.017532	0.014504	0.015938	0.017532	0.017813	0.022141	0.016607	0.017316
A3-CS	0.000213	0.000268	0.000271	0.000269	0.000277	0.000255	0.000267	0.000504	0.000385	0.000541	0.000661	0.000451	0.000601	0.000661	0.000539	0.000283	0.000332	0.000578
A5-CS	1.006254	0.003143	0.003316	0.003274	0.003795	0.003280	0.003384	0.003827	0.004352	0.003952	0.004511	0.008205	0.004101	0.004511	0.003995	0.003091	0.003356	0.004196
A6-CS	0.000307	1.000373	0.000396	0.000412	0.001001	0.000439	0.000406	0.000400	0.001357	0.000338	0.000331	0.000263	0.000301	0.000331	0.000394	0.000430	0.000738	0.000390
A7-CS	0.000821	0.000999	1.001061	0.001107	0.002794	0.001188	0.001088	0.001084	0.003817	0.000909	0.000882	0.000702	0.000802	0.000882	0.001065	0.001171	0.002058	0.001056
A8-CS	0.003001	0.002811	0.002979	1.003054	0.006421	0.003203	0.003051	0.003071	0.008483	0.002748	0.002822	0.003115	0.002565	0.002822	0.003070	0.003098	0.004837	0.003087
A10-CS	0.007749	0.009333	0.009808	0.013305	0.012560	0.016285	0.009977	0.020308	0.013718	0.010927	0.008461	0.006930	0.007692	0.008461	0.019257	0.021129	0.009344	0.017503
A11-CS	0.002728	0.003371	0.003607	0.003502	0.003262	1.003407	0.003720	0.002485	0.002674	0.002392	0.002543	0.002020	0.002312	0.002543	0.002517	0.002560	0.002175	0.002448
A12-CS	0.006446	0.007845	0.008331	0.008690	0.021934	0.009328	1.008544	0.008512	0.029961	0.007134	0.006926	0.005514	0.006296	0.006926	0.008361	0.009194	0.016159	0.008291



	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
A1-TL	0.026083	0.032382	0.033896	0.033721	0.047743	0.032921	0.034378	1.028943	0.053245	0.034817	0.024880	0.020445	0.022618	0.024880	0.027219	0.093786	0.034570	0.025833
A2-TL	0.002679	0.003241	0.003455	0.003373	0.003343	0.003315	0.003553	0.002852	1.003015	0.002829	0.002958	0.002340	0.002689	0.002958	0.002832	0.003102	0.002450	0.002831
A3-TL	0.001680	0.002114	0.002134	0.002118	0.002183	0.002006	0.002103	0.003968	0.003035	1.004261	0.005204	0.003550	0.004731	0.005204	0.004247	0.002226	0.002616	0.004548
A4-TL	0.000336	0.000423	0.000427	0.000424	0.000437	0.000401	0.000421	0.000794	0.000607	0.000852	1.001041	0.000710	0.000946	0.001041	0.000849	0.000445	0.000523	0.000910
A5-TL	0.002354	0.001174	0.001238	0.001222	0.001396	0.001223	0.001264	0.001431	0.001593	0.001481	0.001693	1.003094	0.001539	0.001693	0.001495	0.001152	0.001241	0.001572
A6-TL	0.000047	0.000058	0.000061	0.000063	0.000148	0.000067	0.000063	0.000061	0.000198	0.000052	0.000051	0.000041	1.000047	0.000051	0.000060	0.000065	0.000109	0.000060
A7-TL	0.000082	0.000100	0.000106	0.000111	0.000279	0.000119	0.000109	0.000108	0.000382	0.000091	0.000088	0.000070	0.000080	1.000088	0.000107	0.000117	0.000206	0.000106
A8-TL	0.000835	0.000777	0.000823	0.000840	0.001680	0.000875	0.000842	0.000839	0.002191	0.000759	0.000785	0.000872	0.000714	0.000785	1.000841	0.000840	0.001268	0.000846
A9-TL	0.038214	0.047790	0.049449	0.048737	0.054884	0.046620	0.049700	0.038816	0.062305	0.058419	0.036247	0.030232	0.032951	0.036247	0.038704	1.040838	0.041146	0.036442
A10-TL	0.004483	0.005443	0.005722	0.007832	0.007338	0.009635	0.005822	0.011973	0.008005	0.006324	0.004881	0.003958	0.004437	0.004881	0.011403	0.012359	1.005443	0.010344
A11-TL	0.002542	0.003141	0.003361	0.003263	0.003039	0.003174	0.003466	0.002316	0.002492	0.002229	0.002370	0.001882	0.002155	0.002370	0.002345	0.002386	0.002027	1.002281
A12-TL	0.001109	0.001349	0.001433	0.001494	0.003772	0.001604	0.001469	0.001464	0.005153	0.001227	0.001191	0.000948	0.001083	0.001191	0.001438	0.001581	0.002779	0.001426
A1-TS	0.075581	0.093762	0.098481	0.097624	0.131509	0.095273	0.100145	0.080853	0.141704	0.093858	0.069790	0.057510	0.063445	0.069790	0.076114	0.238409	0.093898	0.072168
A2-TS	0.019080	0.023247	0.024804	0.024201	0.023771	0.023823	0.025527	0.020274	0.021320	0.020185	0.021401	0.016691	0.019456	0.021401	0.020384	0.021415	0.017490	0.020442
A3-TS	0.001013	0.001275	0.001287	0.001278	0.001317	0.001210	0.001268	0.002393	0.001831	0.002570	0.003139	0.002142	0.002854	0.003139	0.002562	0.001343	0.001578	0.002743
A4-TS	0.003136	0.003946	0.003983	0.003955	0.004076	0.003744	0.003925	0.007406	0.005665	0.007954	0.009715	0.006627	0.008832	0.009715	0.007928	0.004156	0.004884	0.008490
A5-TS	0.007462	0.003769	0.003977	0.003925	0.004532	0.003931	0.004058	0.004577	0.005184	0.004726	0.005394	0.009780	0.004904	0.005394	0.004777	0.003701	0.004005	0.005017
A6-TS	0.001475	0.001796	0.001907	0.001986	0.004937	0.002126	0.001955	0.001939	0.006721	0.001631	0.001588	0.001263	0.001443	0.001588	0.001906	0.002090	0.003637	0.001890
A7-TS	0.001642	0.001999	0.002123	0.002214	0.005588	0.002376	0.002177	0.002169	0.007633	0.001818	0.001765	0.001405	0.001604	0.001765	0.002130	0.002342	0.004117	0.002112
A8-TS	0.007544	0.007019	0.007439	0.007624	0.016044	0.007999	0.007616	0.007682	0.021209	0.006879	0.007068	0.007860	0.006425	0.007068	0.007681	0.007740	0.012094	0.007728
A10-TS	0.021989	0.026589	0.027946	0.037998	0.035756	0.046573	0.028433	0.058016	0.039043	0.031083	0.024147	0.019644	0.021951	0.024147	0.055155	0.060047	0.026601	0.050128
A11-TS	0.006758	0.008352	0.008935	0.008675	0.008080	0.008439	0.009214	0.006157	0.006624	0.005926	0.006301	0.005004	0.005728	0.006301	0.006234	0.006342	0.005389	0.006063
A12-TS	0.005954	0.007245	0.007694	0.008026	0.020257	0.008615	0.007891	0.007861	0.027671	0.006589	0.006396	0.005093	0.005815	0.006396	0.007722	0.008491	0.014924	0.007658
A13-TS	0.004934	0.006183	0.006279	0.006225	0.006412	0.006090	0.006217	0.007946	0.007287	0.008105	0.009222	0.006765	0.008384	0.009222	0.008269	0.006284	0.006562	0.008581
A1-HTL	0.003700	0.004595	0.004806	0.004786	0.006867	0.004673	0.004872	0.004155	0.007717	0.005017	0.003566	0.002926	0.003242	0.003566	0.003901	0.013478	0.004989	0.003705
A2-HTL	0.000879	0.001069	0.001140	0.001113	0.001101	0.001092	0.001173	0.000855	0.000955	0.000832	0.000848	0.000689	0.000771	0.000848	0.000846	0.001004	0.000770	0.000829
A5-HTL	0.000505	0.000252	0.000266	0.000262	0.000306	0.000263	0.000271	0.000308	0.000352	0.000318	0.000363	0.000663	0.000330	0.000363	0.000321	0.000248	0.000271	0.000338
A6-HTL	0.000033	0.000041	0.000043	0.000044	0.000086	0.000045	0.000044	0.000041	0.000109	0.000036	0.000037	0.000029	0.000033	0.000037	0.000041	0.000043	0.000063	0.000040
A7-HTL	0.000012	0.000015	0.000016	0.000017	0.000042	0.000018	0.000016	0.000016	0.000057	0.000014	0.000013	0.000011	0.000012	0.000013	0.000016	0.000018	0.000031	0.000016
A8-HTL	0.000073	0.000089	0.000095	0.000096	0.000179	0.000099	0.000097	0.000089	0.000226	0.000079	0.000081	0.000063	0.000073	0.000081	0.000088	0.000093	0.000132	0.000087
A10-HTL	0.000451	0.000543	0.000570	0.000769	0.000727	0.000937	0.000580	0.001171	0.000795	0.000640	0.000502	0.000410	0.000456	0.000502	0.001111	0.001216	0.000543	0.001012
A11-HTL	0.000930	0.001149	0.001230	0.001194	0.001112	0.001161	0.001268	0.000847	0.000912	0.000815	0.000867	0.000689	0.000788	0.000867	0.000858	0.000873	0.000742	0.000834
A12-HTL	0.000152	0.000185	0.000196	0.000205	0.000517	0.000220	0.000201	0.000201	0.000706	0.000168	0.000163	0.000130	0.000148	0.000163	0.000197	0.000217	0.000381	0.000195
A1-HTS	0.017002	0.021122	0.022118	0.021912	0.028791	0.021312	0.022439	0.018870	0.031453	0.022618	0.016402	0.013414	0.014910	0.016402	0.017596	0.056369	0.020855	0.016756
A2-HTS	0.016040	0.019538	0.020847	0.020342	0.020016	0.020005	0.021454	0.016449	0.017695	0.016244	0.016989	0.013436	0.015444	0.016989	0.016453	0.018062	0.014440	0.016368
A4-HTS	0.002939	0.003697	0.003733	0.003706	0.003819	0.003509	0.003678	0.006940	0.005309	0.007454	0.009103	0.006210	0.008276	0.009103	0.007430	0.003894	0.004576	0.007956
A5-HTS	0.001876	0.000955	0.001007	0.000995	0.001168	0.000998	0.001028	0.001158	0.001344	0.001193	0.001360	0.002454	0.001236	0.001360	0.001208	0.000940	0.001027	0.001267
A6-HTS	0.000847	0.001031	0.001095	0.001139	0.002825	0.001220	0.001122	0.001112	0.003845	0.000936	0.000911	0.000725	0.000829	0.000911	0.001093	0.001198	0.002082	0.001084
A7-HTS	0.000493	0.000600	0.000637	0.000664	0.001676	0.000713	0.000653	0.000651	0.002290	0.000545	0.000529	0.000421	0.000481	0.000529	0.000639	0.000703	0.001235	0.000634
A8-HTS	0.004593	0.004509	0.004781	0.004919	0.010816	0.005188	0.004897	0.004925	0.014421	0.004349	0.004416	0.004633	0.004015	0.004416	0.004906	0.005041	0.008105	0.004920
A10-HTS	0.011215	0.013576	0.014270	0.019429	0.018263	0.023832	0.014519	0.029672	0.019938	0.015852	0.012306	0.009999	0.011187	0.012306	0.028225	0.030680	0.013580	0.025644
A11-HTS	0.002232	0.002758	0.002951	0.002865	0.002669	0.002787	0.003043	0.002033	0.002188	0.001957	0.002081	0.001653	0.001892	0.002081	0.002059	0.002095	0.001780	0.002003
A12-HTS	0.005215	0.006346	0.006739	0.007030	0.017743	0.007545	0.006911	0.006885	0.024236	0.005771	0.005602	0.004461	0.005093	0.005602	0.006763	0.007437	0.013071	0.006707

	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
A13-HTS	0.001686	0.002113	0.002146	0.002127	0.002191	0.002081	0.002125	0.002715	0.002490	0.002770	0.003151	0.002312	0.002865	0.003151	0.002826	0.002147	0.002242	0.002932
A1-LL	0.000531	0.000660	0.000691	0.000683	0.000868	0.000663	0.000700	0.000583	0.000944	0.000714	0.000509	0.000417	0.000462	0.000509	0.000544	0.001864	0.000629	0.000518
A2-LL	0.000270	0.000328	0.000350	0.000341	0.000339	0.000335	0.000359	0.000272	0.000298	0.000267	0.000274	0.000221	0.000249	0.000274	0.000269	0.000313	0.000241	0.000266
A5-LL	0.000165	0.000081	0.000085	0.000084	0.000093	0.000084	0.000087	0.000099	0.000105	0.000103	0.000118	0.000219	0.000107	0.000118	0.000104	0.000079	0.000083	0.000109
A6-LL	0.000021	0.000026	0.000027	0.000027	0.000044	0.000028	0.000028	0.000025	0.000052	0.000023	0.000023	0.000018	0.000021	0.000023	0.000025	0.000025	0.000032	0.000024
A7-LL	0.000008	0.000010	0.000011	0.000011	0.000028	0.000012	0.000011	0.000011	0.000038	0.000009	0.000009	0.000007	0.000008	0.000009	0.000011	0.000012	0.000021	0.000011
A8-LL	0.000052	0.000064	0.000068	0.000068	0.000109	0.000069	0.000070	0.000061	0.000130	0.000056	0.000058	0.000046	0.000053	0.000058	0.000062	0.000063	0.000080	0.000061
A10-LL	0.000160	0.000191	0.000201	0.000264	0.000252	0.000317	0.000204	0.000400	0.000277	0.000230	0.000187	0.000152	0.000170	0.000187	0.000379	0.000415	0.000191	0.000348
A11-LL	0.000372	0.000460	0.000492	0.000478	0.000445	0.000465	0.000507	0.000339	0.000365	0.000326	0.000347	0.000275	0.000315	0.000347	0.000343	0.000349	0.000297	0.000334
A12-LL	0.000041	0.000050	0.000053	0.000055	0.000140	0.000059	0.000054	0.000054	0.000191	0.000045	0.000044	0.000035	0.000040	0.000044	0.000053	0.000059	0.000103	0.000053
A1-LS	0.004317	0.005363	0.005624	0.005557	0.006992	0.005399	0.005712	0.004820	0.007486	0.005633	0.004215	0.003427	0.003832	0.004215	0.004458	0.012383	0.005054	0.004261
A2-LS	0.003148	0.003814	0.004067	0.003970	0.003919	0.003907	0.004184	0.003415	0.003558	0.003406	0.003600	0.002818	0.003273	0.003600	0.003410	0.003606	0.002910	0.003428
A5-LS	0.000835	0.000413	0.000436	0.000430	0.000491	0.000430	0.000444	0.000506	0.000561	0.000524	0.000599	0.001100	0.000544	0.000599	0.000528	0.000406	0.000437	0.000556
A6-LS	0.000335	0.000408	0.000433	0.000451	0.001125	0.000483	0.000444	0.000441	0.001534	0.000370	0.000360	0.000287	0.000327	0.000360	0.000433	0.000475	0.000829	0.000429
A7-LS	0.000246	0.000300	0.000318	0.000332	0.000838	0.000356	0.000327	0.000325	0.001145	0.000273	0.000265	0.000211	0.000241	0.000265	0.000320	0.000351	0.000618	0.000317
A8-LS	0.001618	0.001848	0.001962	0.002040	0.004992	0.002181	0.002011	0.002012	0.006786	0.001709	0.001679	0.001461	0.001527	0.001679	0.001983	0.002143	0.003693	0.001973
A10-LS	0.002102	0.002530	0.002659	0.003597	0.003400	0.004397	0.002705	0.005488	0.003715	0.002970	0.002310	0.001891	0.002100	0.002310	0.005204	0.005707	0.002533	0.004734
A11-LS	0.005208	0.006436	0.006886	0.006686	0.006227	0.006504	0.007101	0.004745	0.005105	0.004567	0.004856	0.003856	0.004414	0.004856	0.004804	0.004888	0.004153	0.004673
A12-LS	0.000587	0.000715	0.000759	0.000792	0.001998	0.000850	0.000778	0.000775	0.002729	0.000650	0.000631	0.000502	0.000573	0.000631	0.000762	0.000837	0.001472	0.000755
A1-OL	0.009839	0.012221	0.012769	0.012725	0.018436	0.012425	0.012932	0.011258	0.020916	0.013706	0.009639	0.007889	0.008763	0.009639	0.010518	0.036847	0.013461	0.010003
A2-OL	0.002148	0.002598	0.002770	0.002705	0.002696	0.002649	0.002849	0.001938	0.002278	0.001845	0.001792	0.001529	0.001629	0.001792	0.001875	0.002504	0.001811	0.001798
A3-OL	0.001173	0.001476	0.001490	0.001480	0.001525	0.001401	0.001468	0.002771	0.002120	0.002976	0.003635	0.002480	0.003304	0.003635	0.002966	0.001555	0.001827	0.003176
A5-OL	0.000835	0.000413	0.000436	0.000430	0.000491	0.000430	0.000444	0.000506	0.000561	0.000524	0.000599	0.001100	0.000544	0.000599	0.000528	0.000406	0.000437	0.000556
A6-OL	0.000060	0.000073	0.000077	0.000080	0.000189	0.000085	0.000079	0.000077	0.000255	0.000066	0.000065	0.000051	0.000059	0.000065	0.000076	0.000083	0.000140	0.000076
A7-OL	0.000062	0.000075	0.000080	0.000083	0.000210	0.000089	0.000082	0.000081	0.000286	0.000068	0.000066	0.000053	0.000060	0.000066	0.000080	0.000088	0.000154	0.000079
A8-OL	0.000816	0.000388	0.000410	0.000406	0.000494	0.000409	0.000418	0.000487	0.000584	0.000503	0.000576	0.001083	0.000523	0.000576	0.000509	0.000389	0.000439	0.000537
A9-OL	0.049029	0.061307	0.063455	0.062543	0.070635	0.059844	0.063792	0.049750	0.080041	0.076436	0.046433	0.038728	0.042211	0.046433	0.049602	0.052353	0.052797	0.046703
A10-OL	0.006175	0.007557	0.007947	0.010949	0.010190	0.013520	0.008089	0.016756	0.011107	0.008734	0.006751	0.005410	0.006138	0.006751	0.016028	0.017145	0.007547	0.014526
A11-OL	0.000806	0.000996	0.001066	0.001035	0.000964	0.001006	0.001099	0.000734	0.000790	0.000707	0.000751	0.000597	0.000683	0.000751	0.000744	0.000756	0.000643	0.000723
A12-OL	0.000390	0.000475	0.000504	0.000526	0.001327	0.000564	0.000517	0.000515	0.001813	0.000432	0.000419	0.000334	0.000381	0.000419	0.000506	0.000556	0.000978	0.000502
A1-OS	0.008607	0.010682	0.011223	0.011097	0.014276	0.010807	0.011416	0.009133	0.015140	0.010610	0.007944	0.006538	0.007222	0.007944	0.008581	0.026284	0.010173	0.008145
A2-OS	0.006224	0.007550	0.008052	0.007860	0.007787	0.007716	0.008283	0.006069	0.006765	0.005908	0.005997	0.004890	0.005452	0.005997	0.005980	0.007150	0.005456	0.005865
A5-OS	0.004198	0.002089	0.002204	0.002176	0.002525	0.002182	0.002249	0.002555	0.002902	0.002640	0.003016	0.005519	0.002742	0.003016	0.002668	0.002058	0.002239	0.002805
A6-OS	0.000098	0.000120	0.000127	0.000131	0.000299	0.000138	0.000130	0.000126	0.000399	0.000108	0.000106	0.000084	0.000097	0.000106	0.000124	0.000134	0.000220	0.000123
A7-OS	0.000123	0.000150	0.000159	0.000166	0.000419	0.000178	0.000163	0.000163	0.000573	0.000136	0.000132	0.000105	0.000120	0.000132	0.000160	0.000176	0.000309	0.000158
A8-OS	0.000936	0.000898	0.000952	0.000980	0.002160	0.001034	0.000975	0.000987	0.002885	0.000888	0.000888	0.000956	0.000808	0.000888	0.000984	0.001007	0.001622	0.000988
A10-OS	0.003834	0.004605	0.004838	0.006550	0.006197	0.008007	0.004921	0.009994	0.006770	0.005400	0.004178	0.003436	0.003798	0.004178	0.009462	0.010430	0.004612	0.008603
A11-OS	0.002468	0.003050	0.003263	0.003168	0.002950	0.003081	0.003365	0.002248	0.002419	0.002164	0.002301	0.001827	0.002091	0.002301	0.002276	0.002316	0.001968	0.002214
A12-OS	0.001683	0.002049	0.002176	0.002269	0.005728	0.002436	0.002231	0.002223	0.007824	0.001863	0.001809	0.001440	0.001644	0.001809	0.002183	0.002401	0.004220	0.002165
A14	0.082529	0.102670	0.107604	0.105607	0.114775	0.101918	0.109237	0.090035	0.119919	0.118304	0.092621	0.072673	0.084201	0.092621	0.091393	0.085997	0.085443	0.089349
A15	0.293568	0.362231	0.384060	0.377536	0.386297	0.436677	0.393366	0.347392	0.402614	0.362332	0.375997	0.283632	0.341815	0.375997	0.356182	0.334785	0.450527	0.405712
C-1	0.225444	0.281577	0.292239	0.287835	0.324030	0.275989	0.294424	0.246320	0.360958	0.345596	0.221038	0.181896	0.200943	0.221038	0.232232	1.124790	0.241626	0.220434
C-2	0.047869	0.057937	0.061531	0.066651	0.232010	0.071084	0.063102	0.068250	0.288292	0.050610	0.046313	0.038168	0.042103	0.046313	0.065768	0.076658	0.166533	0.061833

	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
C-3	0.224761	0.282149	0.290412	0.285202	0.275500	0.270340	0.290665	0.227104	0.237479	0.207858	0.215488	0.180153	0.195898	0.215488	0.227073	0.236834	0.207561	0.213355
C-4	0.017656	0.021414	0.022741	0.023352	0.061298	0.023854	0.023319	0.021607	0.151010	0.088230	0.018005	0.014592	0.016368	0.018005	0.021110	0.024216	0.052669	0.020323
C-5	0.035630	0.044449	0.046363	0.045536	0.049232	0.043738	0.046892	0.035856	0.050866	0.046889	0.031566	0.026487	0.028696	0.031566	0.033906	0.128938	0.035374	0.031830
C-6	0.006951	0.008559	0.009143	0.008906	0.008602	0.008679	0.009418	0.007748	0.007756	0.007824	0.008627	0.006482	0.007843	0.008627	0.007970	0.007459	0.006290	0.008033
C-7	0.030739	0.038080	0.040356	0.039782	0.052776	0.038918	0.041320	0.028247	0.045627	0.120184	0.025263	0.021117	0.022967	0.025263	0.028002	0.030229	0.030721	0.026324
C-8	0.031808	0.039560	0.041465	0.040742	0.045460	0.039364	0.042098	0.041671	0.047757	0.045060	0.035060	0.027631	0.031872	0.035060	0.034920	0.040884	0.033684	0.034039
C-9	0.001024	0.001257	0.001354	0.001317	0.001258	0.001292	0.001403	0.001287	0.001190	0.001342	0.001533	0.001103	0.001394	0.001533	0.001344	0.001095	0.000961	0.001392
C-10	0.039906	0.049348	0.052548	0.051153	0.048431	0.049763	0.053996	0.047132	0.044235	0.047690	0.054037	0.039929	0.049125	0.054037	0.048871	0.039672	0.037023	0.049728
C-11	0.001492	0.001810	0.001915	0.002062	0.007935	0.002182	0.001958	0.002225	0.008453	0.004908	0.001667	0.001329	0.001516	0.001667	0.002170	0.002362	0.004510	0.002074
C-12	0.146165	0.180661	0.193143	0.187575	0.175287	0.182319	0.199061	0.123409	0.133254	0.110070	0.110697	0.093037	0.100633	0.110697	0.117520	0.140441	0.110751	0.110618
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.131846	0.161815	0.172765	0.168610	0.166241	0.164969	0.177882	0.106076	0.133663	0.098583	0.093747	0.081624	0.085224	0.093747	0.104112	0.146473	0.106168	0.097167
C-15	0.039820	0.049076	0.052460	0.051087	0.048838	0.050778	0.054061	0.052768	0.047982	0.055146	0.063545	0.045521	0.057769	0.063545	0.055296	0.041419	0.041312	0.058061
C-16	0.004008	0.004945	0.005214	0.005120	0.005137	0.004968	0.005319	0.007039	0.005947	0.007532	0.008938	0.006192	0.008126	0.008938	0.007465	0.004979	0.004841	0.007916
C-17	0.014408	0.012931	0.013364	0.013301	0.017621	0.012835	0.013418	0.019248	0.019869	0.018136	0.012496	0.015274	0.011360	0.012496	0.012708	0.031857	0.013705	0.012354
C-18	0.020822	0.026196	0.026448	0.026256	0.027061	0.024860	0.026059	0.049173	0.037613	0.052811	0.064501	0.044003	0.058637	0.064501	0.052641	0.027591	0.032425	0.056367
C-19	0.072273	0.087955	0.093406	0.097430	0.245911	0.104577	0.095786	0.095431	0.335911	0.079987	0.077649	0.061822	0.070590	0.077649	0.093738	0.103075	0.181162	0.092958
C-20	0.032230	0.039915	0.042083	0.041109	0.039698	0.039660	0.042918	0.034790	0.035272	0.034079	0.036897	0.028669	0.033542	0.036897	0.035465	0.034437	0.029342	0.034967
C-21	0.060617	0.024391	0.025722	0.025273	0.025680	0.025329	0.026237	0.032544	0.029218	0.034623	0.040392	0.083141	0.036720	0.040392	0.034341	0.024211	0.025082	0.036680
C-22	0.095020	0.116641	0.122679	0.169506	0.157353	0.209645	0.124881	0.259527	0.171438	0.134471	0.103888	0.082913	0.094444	0.103888	0.248644	0.264786	0.116431	0.225218
C-23	0.210353	0.260136	0.275417	0.268858	0.258908	0.260246	0.281784	0.240194	0.235505	0.240044	0.264856	0.200450	0.240778	0.264856	0.246822	0.226166	0.194869	0.247254
C-24	0.047936	0.058834	0.063085	0.061413	0.059428	0.060019	0.065161	0.059777	0.056629	0.062196	0.070504	0.051190	0.064094	0.070504	0.062250	0.052947	0.045665	0.064177
C-25	0.078540	0.097063	0.103848	0.100826	0.093907	0.098079	0.107090	0.071553	0.076990	0.068868	0.073227	0.058153	0.066570	0.073227	0.072455	0.073712	0.062632	0.070469
C-26	0.009388	0.011765	0.011949	0.011845	0.012202	0.011589	0.011830	0.015120	0.013866	0.015422	0.017549	0.012873	0.015953	0.017549	0.015736	0.011958	0.012486	0.016329
C-27	0.035278	0.043260	0.045557	0.047265	0.067961	0.116411	0.046421	0.047421	0.110480	0.060092	0.040637	0.031993	0.036943	0.040637	0.047110	0.055672	0.209993	0.094281
Ld-BL	0.037804	0.046198	0.048450	0.048061	0.064692	0.046886	0.049210	0.041007	0.070507	0.048047	0.035997	0.030152	0.032725	0.035997	0.038733	0.120279	0.046769	0.036936
Ld-BS	0.067316	0.081629	0.085723	0.084924	0.112533	0.082851	0.087159	0.070939	0.121069	0.082455	0.061961	0.052842	0.056328	0.061961	0.066939	0.205177	0.080715	0.063684
Ld-CL	0.010561	0.012581	0.013143	0.013091	0.018703	0.012785	0.013309	0.011814	0.021238	0.014265	0.010457	0.009024	0.009507	0.010457	0.011177	0.037105	0.013812	0.010719
Ld-CS	0.179744	0.027671	0.029031	0.028798	0.039676	0.028109	0.029496	0.024396	0.042473	0.028590	0.021277	0.018193	0.019343	0.021277	0.023001	0.072087	0.028097	0.021900
Ld-TL	0.012722	0.015520	0.016243	0.016157	0.022747	0.015776	0.016472	0.482009	0.027024	0.080324	0.012277	0.168205	0.011161	0.012277	0.013283	0.044252	0.017173	0.024859
Ld-TS	0.035596	0.043258	0.045436	0.045049	0.060498	0.043991	0.046204	0.037638	0.065251	0.043531	0.032765	0.027846	0.029786	0.032765	0.035530	0.108815	0.043361	0.033787
Ld-HTL	0.001806	0.002188	0.002289	0.002279	0.003257	0.002226	0.002320	0.001989	0.003660	0.002393	0.001722	0.001467	0.001566	0.001722	0.001873	0.006335	0.002373	0.001784
Ld-HTS	0.007196	0.008744	0.009158	0.009074	0.011896	0.008833	0.009292	0.007863	0.013003	0.009386	0.006880	0.005817	0.006254	0.006880	0.007351	0.023085	0.008643	0.007017
Ld-LL	0.000275	0.000322	0.000337	0.000334	0.000422	0.000324	0.000342	0.000289	0.000459	0.000351	0.000257	0.000229	0.000234	0.000257	0.000271	0.000887	0.000308	0.000260
Ld-LS	0.001490	0.001758	0.001844	0.001823	0.002283	0.001774	0.001873	0.001604	0.002449	0.001859	0.001424	0.001249	0.001294	0.001424	0.001493	0.003969	0.001663	0.001435
Ld-OL	0.004846	0.005926	0.006190	0.006168	0.008856	0.006023	0.006269	0.005549	0.010053	0.006705	0.004844	0.004030	0.004044	0.004844	0.005215	0.017472	0.006513	0.004987
Ld-OS	0.004614	0.005265	0.005535	0.005473	0.006981	0.005340	0.005631	0.004617	0.007426	0.005302	0.004134	0.003849	0.003758	0.004134	0.004379	0.012419	0.005039	0.004197
Ld-LSD	0.003089	0.003834	0.004024	0.003988	0.005335	0.003888	0.004089	0.003337	0.005769	0.003911	0.002888	0.002374	0.002625	0.002888	0.003135	0.009891	0.003824	0.002976
Lb-BL	0.012247	0.014655	0.015544	0.016049	0.023768	0.016620	0.015925	0.015440	0.027910	0.013746	0.012981	0.010627	0.011801	0.012981	0.015165	0.019379	0.017418	0.014774
Lb-BS	0.061749	0.072220	0.076559	0.080268	0.122532	0.084342	0.078403	0.079290	0.145759	0.066735	0.062502	0.053409	0.056820	0.062502	0.077361	0.099641	0.089778	0.074858
Lb-CL	0.005404	0.006353	0.006752	0.006926	0.009950	0.007154	0.006928	0.006664	0.011577	0.005917	0.005893	0.004876	0.005358	0.005893	0.006619	0.007397	0.007350	0.006514
Lb-CS	0.124220	0.176204	0.183251	0.161804	0.214456	0.050346	0.089543	0.034359	0.060744	0.029259	0.027094	0.022273	0.024631	0.027094	0.033554	0.035669	0.037668	0.032491
Lb-TL	0.007192	0.008564	0.009034	0.009341	0.012976	0.009613	0.009217	0.093560	0.182650	0.016303	0.565010	0.139018	0.917686	1.009455	0.260196	0.021949	0.169107	0.375989

	A5-CS	A6-CS	A7-CS	A8-CS	A10-CS	A11-CS	A12-CS	A1-TL	A2-TL	A3-TL	A4-TL	A5-TL	A6-TL	A7-TL	A8-TL	A9-TL	A10-TL	A11-TL
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Lb-TS	0.050796	0.060197	0.063487	0.067818	0.094934	0.071875	0.064764	0.073581	0.111723	0.061990	0.057670	0.047364	0.052427	0.057670	0.072097	0.096591	0.071691	0.069835
Lb-HTL	0.000756	0.000917	0.000975	0.001003	0.001376	0.001036	0.001001	0.000913	0.001546	0.000785	0.000754	0.000613	0.000685	0.000754	0.000898	0.001113	0.000989	0.000868
Lb-HTS	0.028529	0.034153	0.036032	0.038934	0.055573	0.041706	0.036766	0.044140	0.066718	0.036057	0.034414	0.027483	0.031285	0.034414	0.043384	0.051127	0.042318	0.042161
Lb-LL	0.000250	0.000296	0.000315	0.000323	0.000372	0.000331	0.000323	0.000317	0.000391	0.000282	0.000280	0.000228	0.000255	0.000280	0.000314	0.000369	0.000274	0.000307
Lb-LS	0.009949	0.011981	0.012700	0.013064	0.017279	0.013449	0.013006	0.012584	0.019411	0.011101	0.010871	0.008767	0.009883	0.010871	0.012432	0.014675	0.012752	0.012137
Lb-OL	0.001967	0.002398	0.002552	0.002570	0.002802	0.002590	0.002621	0.002582	0.002907	0.002462	0.002622	0.001977	0.002383	0.002622	0.002628	0.002485	0.002146	0.002639
Lb-OS	0.006593	0.007593	0.008037	0.008374	0.012909	0.008754	0.008220	0.008305	0.015468	0.007211	0.006796	0.005901	0.006178	0.006796	0.008135	0.010737	0.009560	0.007921
Lb-HRD	0.243261	0.375190	0.256490	0.265499	0.220767	0.139725	0.153015	0.291031	0.187736	0.131610	0.087648	0.207277	0.079680	0.087648	0.258633	0.216611	0.376172	0.129335
K-BL	0.025977	0.030136	0.031579	0.032737	0.036726	0.033304	0.032053	0.035884	0.039697	0.034204	0.032325	0.026774	0.029386	0.032325	0.035534	0.049377	0.028865	0.034858
K-BS	0.046675	0.052168	0.055358	0.054809	0.061739	0.054257	0.056735	0.044660	0.060150	0.043757	0.041228	0.038937	0.037480	0.041228	0.043581	0.067712	0.043855	0.042265
K-CL	0.011939	0.013330	0.014015	0.013870	0.016068	0.013579	0.014263	0.013337	0.017137	0.014293	0.013791	0.012082	0.012538	0.013791	0.013400	0.019923	0.012416	0.013355
K-CS	0.340271	0.025152	0.012095	0.471791	0.072255	0.216750	0.012351	0.011143	0.016843	0.011154	0.010069	0.010053	0.009154	0.010069	0.010882	0.019612	0.011455	0.010609
K-TL	0.005652	0.006359	0.006641	0.006734	0.007814	0.006710	0.006723	0.058225	0.117612	0.668202	0.452425	0.317129	0.007255	0.007981	0.443566	0.016312	0.085512	0.434736
K-TS	0.019453	0.021480	0.022500	0.023660	0.028933	0.024479	0.022833	0.027121	0.032874	0.024709	0.023893	0.020864	0.021721	0.023893	0.026909	0.036414	0.022972	0.026467
K-HTL	0.001185	0.001323	0.001405	0.001395	0.001504	0.001383	0.001440	0.001164	0.001444	0.001150	0.001090	0.001015	0.000991	0.001090	0.001149	0.001800	0.001071	0.001117
K-HTS	0.009315	0.010563	0.011051	0.011440	0.013980	0.011722	0.011203	0.013636	0.016272	0.012484	0.013423	0.010944	0.012203	0.013423	0.013845	0.012534	0.011620	0.013937
K-LL	0.000404	0.000458	0.000487	0.000485	0.000500	0.000483	0.000501	0.000408	0.000467	0.000380	0.000387	0.000348	0.000352	0.000387	0.000406	0.000462	0.000356	0.000397
K-LS	0.003089	0.003567	0.003803	0.003825	0.004601	0.003868	0.003911	0.003301	0.004802	0.002949	0.003028	0.002628	0.002753	0.003028	0.003292	0.003421	0.003291	0.003221
K-OL	0.007219	0.008470	0.008860	0.010181	0.010648	0.011205	0.008981	0.013085	0.011767	0.010191	0.008884	0.007314	0.008077	0.008884	0.012813	0.015411	0.008327	0.012151
K-OS	0.005957	0.006158	0.006546	0.006708	0.007142	0.006860	0.006717	0.006262	0.007037	0.005463	0.005411	0.005509	0.004919	0.005411	0.006187	0.007150	0.005191	0.006009
B-L	0.081663	0.097919	0.102896	0.104028	0.132461	0.103785	0.106773	0.099280	0.145223	0.103093	0.089038	0.073356	0.080943	0.089038	0.096570	0.196203	0.098714	0.093781
B-S	0.214991	0.263208	0.261599	0.264780	0.336725	0.251062	0.254375	0.242981	0.363180	0.222723	0.191643	0.181188	0.174221	0.191643	0.232578	0.412294	0.269731	0.210546
C-L	0.031654	0.036889	0.038786	0.038696	0.050330	0.038202	0.039473	0.036278	0.055799	0.039330	0.034694	0.029492	0.031540	0.034694	0.035627	0.072550	0.037793	0.034978
C-S	0.673269	0.812013	0.956336	0.895108	0.655155	0.915647	1.053554	0.105686	0.146030	0.089795	0.075814	0.077020	0.068922	0.075814	0.100368	0.166130	0.119561	0.085706
T-L	0.027161	0.032395	0.033986	0.034265	0.045633	0.034082	0.034529	0.635926	0.329434	0.767040	1.032153	0.626149	0.938321	1.032153	0.719249	0.084644	0.273477	0.837842
T-S	0.177690	0.233718	0.208692	0.216097	0.252295	0.185858	0.183390	0.225506	0.269327	0.174864	0.148052	0.159303	0.134593	0.148052	0.213278	0.309184	0.246251	0.174263
HT-L	0.004661	0.005551	0.005857	0.005842	0.007313	0.005777	0.005976	0.005209	0.007803	0.005495	0.004848	0.004052	0.004407	0.004848	0.005097	0.010388	0.005354	0.004961
HT-S	0.079113	0.104953	0.092962	0.097241	0.113775	0.084054	0.080997	0.107054	0.124369	0.079386	0.071132	0.074352	0.064665	0.071132	0.102063	0.118749	0.113756	0.084387
Lo-L	0.001125	0.001316	0.001393	0.001392	0.001557	0.001383	0.001426	0.001291	0.001598	0.001304	0.001248	0.001041	0.001134	0.001248	0.001280	0.001997	0.001154	0.001262
Lo-S	0.042572	0.059912	0.048396	0.049685	0.050470	0.036548	0.037827	0.051466	0.049591	0.032958	0.027989	0.037222	0.025445	0.027989	0.047830	0.048068	0.060166	0.033660
O-L	0.016057	0.019291	0.020236	0.021508	0.025145	0.022333	0.020557	0.023607	0.027583	0.021881	0.018860	0.015245	0.017146	0.018860	0.023059	0.038951	0.019132	0.022169
O-S	0.039143	0.051493	0.044358	0.045355	0.048857	0.036560	0.037486	0.046328	0.049663	0.033898	0.029779	0.035408	0.027072	0.029779	0.043727	0.052087	0.051732	0.034018
COM	0.044687	0.055063	0.058721	0.057253	0.055296	0.055744	0.060408	0.059224	0.054184	0.061613	0.070702	0.050902	0.064275	0.070702	0.061897	0.049090	0.044263	0.064026
FA1	0.063900	0.077902	0.082671	0.081449	0.085805	0.079837	0.084733	0.090967	0.091486	0.095569	0.105984	0.077004	0.096349	0.105984	0.094337	0.091125	0.070577	0.097533
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.028695	0.034984	0.037125	0.036576	0.038533	0.035853	0.038051	0.040851	0.041084	0.042917	0.047594	0.034580	0.043267	0.047594	0.042364	0.040922	0.031694	0.043799
FA4	0.089346	0.109759	0.117110	0.114170	0.111574	0.111227	0.120518	0.099338	0.101545	0.100588	0.109740	0.083039	0.099764	0.109740	0.101933	0.100404	0.081685	0.102516
FA5	0.021095	0.026018	0.027466	0.026875	0.026604	0.026012	0.028039	0.024698	0.025011	0.024815	0.027095	0.020586	0.024632	0.027095	0.025323	0.024573	0.020331	0.025371
FA6	0.019104	0.023469	0.024824	0.024326	0.024758	0.023636	0.025380	0.017894	0.021664	0.017178	0.016904	0.014088	0.015367	0.016904	0.017759	0.023781	0.017015	0.016929
FA7	0.028695	0.034984	0.037125	0.036576	0.038533	0.035853	0.038051	0.040851	0.041084	0.042917	0.047594	0.034580	0.043267	0.047594	0.042364	0.040922	0.031694	0.043799
FA8	0.138302	0.176007	0.179908	0.176639	0.177253	0.171392	0.183506	0.242853	0.205199	0.259870	0.308398	0.213641	0.280362	0.308398	0.257561	0.171792	0.167031	0.273106
FA9	0.004305	0.005305	0.005657	0.005516	0.005327	0.005371	0.005820	0.005706	0.005220	0.005936	0.006812	0.004904	0.006192	0.006812	0.005963	0.004729	0.004264	0.006168

	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
A1-BL	0.075697	0.117165	0.156463	0.126712	0.119460	0.091803	0.120220	0.120900	0.119035	0.139989	0.114546	0.120900	0.083353	0.085577	0.134824	0.060713	0.075347	0.069366
A2-BL	0.019141	0.023387	0.024705	0.021880	0.022651	0.018708	0.022760	0.022889	0.022714	0.024274	0.021968	0.022889	0.016322	0.025311	0.025747	0.020075	0.025086	0.026160
A3-BL	0.016652	0.011770	0.009059	0.012587	0.014065	0.010398	0.014153	0.014233	0.013539	0.011291	0.013216	0.014233	0.007058	0.006817	0.006974	0.005658	0.007062	0.006704
A5-BL	0.004382	0.003459	0.004133	0.003453	0.003702	0.008270	0.003709	0.003729	0.003661	0.003990	0.003595	0.003729	0.008914	0.002723	0.003446	0.006736	0.002640	0.002589
A6-BL	0.000454	0.000624	0.001993	0.000502	0.000509	0.000403	0.000508	0.000510	0.000557	0.001396	0.000532	0.000510	0.000340	0.000646	0.001505	0.000389	0.000487	0.000508
A7-BL	0.000440	0.000608	0.001979	0.000485	0.000491	0.000389	0.000489	0.000492	0.000540	0.001380	0.000515	0.000492	0.000330	0.000632	0.001490	0.000378	0.000472	0.000492
A8-BL	0.001766	0.001922	0.004624	0.001692	0.001761	0.002402	0.001760	0.001770	0.001842	0.003479	0.001780	0.001770	0.002382	0.001812	0.003569	0.002075	0.001502	0.001534
A9-BL	0.076512	0.123781	0.135115	0.157028	0.140944	0.106678	0.141875	0.142677	0.137499	0.123449	0.133396	0.142677	0.073901	0.074688	0.126747	0.059006	0.072958	0.063000
A10-BL	0.013036	0.039462	0.021763	0.019477	0.017645	0.013842	0.017752	0.017853	0.026878	0.019957	0.021828	0.017853	0.011955	0.040998	0.019347	0.010027	0.012349	0.012045
A11-BL	0.003194	0.003868	0.003498	0.003939	0.004283	0.003313	0.004310	0.004335	0.004197	0.003904	0.004071	0.004335	0.002351	0.003441	0.003640	0.002934	0.003692	0.003820
A12-BL	0.004837	0.006690	0.021767	0.005336	0.005403	0.004278	0.005384	0.005414	0.005935	0.015177	0.005669	0.005414	0.003627	0.006950	0.016395	0.004153	0.005195	0.005417
A1-BS	0.122730	0.189052	0.249131	0.203723	0.193023	0.148482	0.194252	0.195349	0.192247	0.224226	0.185048	0.195349	0.139925	0.139203	0.215424	0.099557	0.123609	0.114280
A2-BS	0.066163	0.079077	0.084393	0.074648	0.077363	0.063677	0.077732	0.078171	0.077617	0.082957	0.075077	0.078171	0.055848	0.086374	0.088506	0.069562	0.086967	0.090881
A3-BS	0.001745	0.001233	0.000949	0.001319	0.001473	0.001089	0.001483	0.001491	0.001418	0.001183	0.001384	0.001491	0.000739	0.000714	0.000731	0.000593	0.000740	0.000702
A5-BS	0.010908	0.008613	0.010300	0.008599	0.009218	0.020574	0.009235	0.009287	0.009116	0.009941	0.008953	0.009287	0.022171	0.006783	0.008588	0.016758	0.006576	0.006450
A6-BS	0.001363	0.001873	0.005980	0.001505	0.001528	0.001209	0.001523	0.001531	0.001672	0.004188	0.001597	0.001531	0.001019	0.001938	0.004514	0.001168	0.001462	0.001524
A7-BS	0.001539	0.002129	0.006926	0.001698	0.001719	0.001361	0.001713	0.001723	0.001888	0.004829	0.001804	0.001723	0.001154	0.002211	0.005217	0.001321	0.001653	0.001724
A8-BS	0.005960	0.006785	0.017718	0.005836	0.006037	0.007662	0.006029	0.006063	0.006383	0.013035	0.006154	0.006063	0.007498	0.006541	0.013568	0.006718	0.005276	0.005411
A10-BS	0.022994	0.067900	0.037875	0.034046	0.031013	0.024477	0.031202	0.031378	0.046418	0.034864	0.037927	0.031378	0.020916	0.070055	0.033541	0.017399	0.021420	0.020830
A11-BS	0.006445	0.007806	0.007059	0.007950	0.008644	0.006686	0.008699	0.008748	0.008470	0.007879	0.008215	0.008748	0.004744	0.006944	0.007347	0.005921	0.007452	0.007709
A12-BS	0.017324	0.023961	0.077966	0.019111	0.019353	0.015325	0.019284	0.019393	0.021257	0.054361	0.020304	0.019393	0.012990	0.024892	0.058723	0.014875	0.018607	0.019404
A13-BS	0.002693	0.002359	0.002121	0.002412	0.002624	0.002012	0.002628	0.002643	0.002557	0.002353	0.002530	0.002643	0.001437	0.002706	0.002562	0.002389	0.003056	0.003471
A1-CL	0.020589	0.032513	0.045547	0.035662	0.033010	0.025274	0.033221	0.033409	0.032949	0.039909	0.031674	0.033409	0.019831	0.023022	0.038783	0.015850	0.019636	0.017770
A2-CL	0.005089	0.006637	0.007042	0.006162	0.006360	0.005282	0.006392	0.006428	0.006388	0.006881	0.006168	0.006428	0.004666	0.007139	0.007272	0.005603	0.006990	0.007238
A3-CL	0.006185	0.004372	0.003365	0.004675	0.005224	0.003862	0.005257	0.005286	0.005029	0.004194	0.004909	0.005286	0.002621	0.002532	0.002590	0.002102	0.002623	0.002490
A5-CL	0.003333	0.002641	0.003214	0.002631	0.002819	0.006273	0.002824	0.002840	0.002790	0.003078	0.002740	0.002840	0.006758	0.002086	0.002672	0.005111	0.002015	0.001978
A6-CL	0.000100	0.000136	0.000423	0.000110	0.000112	0.000089	0.000112	0.000112	0.000122	0.000298	0.000117	0.000112	0.000074	0.000140	0.000320	0.000085	0.000107	0.000111
A7-CL	0.000352	0.000487	0.001583	0.000388	0.000393	0.000311	0.000392	0.000394	0.000432	0.001104	0.000412	0.000394	0.000264	0.000505	0.001192	0.000302	0.000378	0.000394
A8-CL	0.001055	0.001156	0.002776	0.001018	0.001060	0.001415	0.001059	0.001065	0.001108	0.002090	0.001071	0.001065	0.001394	0.001091	0.002145	0.001225	0.000907	0.000927
A9-CL	0.037914	0.061174	0.066871	0.077901	0.069584	0.052692	0.070043	0.070439	0.067902	0.061091	0.065870	0.070439	0.036520	0.037034	0.062750	0.029246	0.036161	0.031231
A10-CL	0.003011	0.008956	0.004994	0.004486	0.004085	0.003227	0.004110	0.004133	0.006115	0.004594	0.004996	0.004133	0.002757	0.009242	0.004422	0.002291	0.002820	0.002743
A11-CL	0.005342	0.006470	0.005850	0.006589	0.007164	0.005541	0.007210	0.007251	0.007021	0.006530	0.006809	0.007251	0.003932	0.005756	0.006089	0.004907	0.006177	0.006390
A12-CL	0.001873	0.002591	0.008430	0.002066	0.002092	0.001657	0.002085	0.002097	0.002298	0.005878	0.002195	0.002097	0.001404	0.002691	0.006349	0.001608	0.002012	0.002098
A1-CS	0.046111	0.071346	0.095698	0.077081	0.072662	0.055844	0.073124	0.073538	0.072428	0.085530	0.069687	0.073538	0.050646	0.052176	0.082376	0.036960	0.045869	0.042242
A2-CS	0.017652	0.019788	0.020943	0.018799	0.019545	0.016001	0.019634	0.019745	0.019571	0.020721	0.018958	0.019745	0.013818	0.021577	0.022060	0.017481	0.021881	0.022975
A3-CS	0.000634	0.000448	0.000345	0.000480	0.000536	0.000396	0.000539	0.000542	0.000516	0.000430	0.000503	0.000542	0.000269	0.000260	0.000266	0.000216	0.000269	0.000255
A5-CS	0.004382	0.003459	0.004133	0.003453	0.003702	0.008270	0.003709	0.003729	0.003661	0.003990	0.003595	0.003729	0.008914	0.002723	0.003446	0.006736	0.002640	0.002589
A6-CS	0.000330	0.000450	0.001407	0.000364	0.000371	0.000293	0.000370	0.000372	0.000404	0.000990	0.000386	0.000372	0.000246	0.000463	0.001065	0.000282	0.000353	0.000368
A7-CS	0.000879	0.001216	0.003958	0.000970	0.000982	0.000778	0.000979	0.000984	0.001079	0.002759	0.001031	0.000984	0.000659	0.001264	0.002981	0.000755	0.000944	0.000985
A8-CS	0.002791	0.003301	0.008728	0.002827	0.002923	0.003319	0.002920	0.002936	0.003097	0.006403	0.002981	0.002936	0.003141	0.003216	0.006693	0.002950	0.002597	0.002673
A10-CS	0.008460	0.025181	0.013980	0.012546	0.011404	0.008975	0.011473	0.011538	0.017194	0.012850	0.014013	0.011538	0.007704	0.026056	0.012401	0.006433	0.007922	0.007713
A11-CS	0.002555	0.003094	0.002798	0.003151	0.003426	0.002650	0.003448	0.003468	0.003358	0.003123	0.003256	0.003468	0.001880	0.002753	0.002912	0.002347	0.002954	0.003056
A12-CS	0.006903	0.009548	0.031068	0.007615	0.007712	0.006107	0.007684	0.007728	0.008471	0.021662	0.008091	0.007728	0.005176	0.009919	0.023400	0.005927	0.007414	0.007732



	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
A1-TL	0.025260	0.039601	0.054980	0.043182	0.040285	0.030897	0.040542	0.040771	0.040208	0.048493	0.038658	0.040771	0.025896	0.028472	0.046962	0.019870	0.024638	0.022489
A2-TL	0.002936	0.002895	0.002953	0.002764	0.002894	0.002346	0.002906	0.002922	0.002881	0.002974	0.002801	0.002922	0.001929	0.003095	0.003115	0.002495	0.003130	0.003316
A3-TL	0.004996	0.003531	0.002718	0.003776	0.004219	0.003119	0.004246	0.004270	0.004062	0.003387	0.003965	0.004270	0.002117	0.002045	0.002092	0.001697	0.002119	0.002011
A4-TL	0.000999	0.000706	0.000544	0.000755	0.000844	0.000624	0.000849	0.000854	0.000812	0.000677	0.000793	0.000854	0.000423	0.000409	0.000418	0.000339	0.000424	0.000402
A5-TL	0.001644	0.001290	0.001508	0.001291	0.001385	0.003117	0.001388	0.001395	0.001368	0.001470	0.001344	0.001395	0.003362	0.001011	0.001262	0.002537	0.000984	0.000964
A6-TL	0.000051	0.000069	0.000205	0.000057	0.000058	0.000046	0.000058	0.000058	0.000063	0.000146	0.000060	0.000058	0.000038	0.000070	0.000156	0.000044	0.000055	0.000057
A7-TL	0.000088	0.000122	0.000396	0.000097	0.000098	0.000078	0.000098	0.000098	0.000108	0.000276	0.000103	0.000098	0.000066	0.000126	0.000298	0.000076	0.000094	0.000098
A8-TL	0.000776	0.000902	0.002253	0.000786	0.000817	0.000933	0.000816	0.000821	0.000858	0.001679	0.000827	0.000821	0.000879	0.000869	0.001740	0.000823	0.000717	0.000738
A9-TL	0.037075	0.060358	0.065557	0.075847	0.068900	0.052090	0.069357	0.069748	0.067170	0.060009	0.065179	0.069748	0.036042	0.036129	0.061382	0.028575	0.035331	0.030493
A10-TL	0.004883	0.014831	0.008158	0.007295	0.006601	0.005168	0.006641	0.006678	0.010097	0.007475	0.008188	0.006678	0.004476	0.015433	0.007259	0.003763	0.004635	0.004525
A11-TL	0.002381	0.002883	0.002607	0.002937	0.003193	0.002470	0.003213	0.003231	0.003129	0.002910	0.003034	0.003231	0.001752	0.002565	0.002714	0.002187	0.002753	0.002848
A12-TL	1.001187	0.001642	0.005343	0.001310	0.001326	0.001050	0.001321	0.001329	0.001457	0.003725	0.001391	0.001329	0.000890	0.001706	0.004024	0.001019	0.001275	0.001330
A1-TS	0.070922	1.109548	0.146947	0.117643	0.111522	0.085827	0.112231	0.112865	0.111219	0.131765	0.106996	0.112865	0.082321	0.081108	0.126583	0.057850	0.071836	0.066544
A2-TS	0.021222	0.020124	0.020765	0.019458	0.020412	0.016462	0.020490	0.020605	0.020323	0.020940	0.019783	0.020605	0.013545	0.022139	0.022385	0.018276	0.022980	0.024581
A3-TS	0.003013	0.002130	0.001639	0.002278	0.002545	0.001882	0.002561	0.002575	0.002450	0.002043	0.002391	0.002575	0.001277	0.001234	0.001262	0.001024	0.001278	0.001213
A4-TS	0.009325	0.006591	0.005073	0.007049	0.007876	0.005823	0.007926	0.007970	0.007582	0.006323	0.007401	0.007970	0.003952	0.003817	0.003905	0.003169	0.003955	0.003754
A5-TS	0.005241	0.004144	0.004923	0.004140	0.004439	0.009863	0.004448	0.004473	0.004389	0.004766	0.004310	0.004473	0.010620	0.003263	0.004112	0.008034	0.003170	0.003110
A6-TS	0.001582	0.002177	0.006970	0.001747	0.001773	0.001403	0.001767	0.001777	0.001941	0.004878	0.001855	0.001777	0.001184	0.002253	0.005259	0.001357	0.001698	0.001770
A7-TS	0.001759	0.002433	0.007915	0.001940	0.001965	0.001556	0.001958	0.001969	0.002158	0.005519	0.002061	0.001969	0.001319	0.002527	0.005962	0.001510	0.001889	0.001970
A8-TS	0.006989	0.008244	0.021815	0.007061	0.007300	0.008364	0.007291	0.007332	1.007734	0.016000	0.007446	0.007332	0.007940	0.008029	0.016723	0.007427	0.006478	0.006667
A10-TS	0.024137	0.071783	0.039752	0.035654	0.032375	0.025414	0.032572	0.032756	0.049028	0.036519	0.039897	0.032756	0.021883	0.074398	0.035296	0.018334	0.022577	0.022000
A11-TS	0.006329	0.007666	0.006932	0.007807	0.008488	0.006565	0.008542	0.008591	0.008318	0.007737	1.008067	0.008591	0.004658	0.006819	0.007214	0.005814	0.007318	0.007571
A12-TS	0.006375	0.008818	0.028693	0.007033	0.007122	0.005640	0.007097	0.007137	0.007823	0.020006	0.007472	1.007137	0.004781	0.009161	0.021611	0.005474	0.006848	0.007141
A13-TS	0.009041	0.007920	0.007122	0.008098	0.008809	0.006755	0.008824	0.008874	0.008585	0.007902	0.008495	0.008874	1.004823	0.009085	0.008601	0.008022	0.010261	0.011653
A1-HTL	0.003619	0.005684	0.007958	0.006202	0.005768	0.004421	0.005805	0.005838	0.005760	0.006994	0.005536	0.005838	0.003556	1.004067	0.006777	0.002815	0.003489	0.003174
A2-HTL	0.000850	0.000908	0.000956	0.000868	0.000905	0.000737	0.000909	0.000914	0.000905	0.000951	0.000877	0.000914	0.000630	0.000988	1.001010	0.000806	0.001009	0.001063
A5-HTL	0.000352	0.000277	0.000334	0.000277	0.000296	0.000668	0.000297	0.000299	0.000293	0.000321	0.000288	0.000299	0.000721	0.000218	0.000278	1.000544	0.000211	0.000207
A6-HTL	0.000037	0.000047	0.000114	0.000041	0.000043	0.000033	0.000043	0.000043	0.000045	0.000085	0.000043	0.000043	0.000026	0.000046	0.000089	0.000031	0.000039	0.000040
A7-HTL	0.000013	0.000018	0.000059	0.000015	0.000015	0.000012	0.000015	0.000015	0.000016	0.000041	0.000015	0.000015	0.000015	0.000019	0.000045	0.000011	0.000014	0.000015
A8-HTL	0.000080	0.000101	0.000235	0.000090	0.000094	0.000074	0.000094	0.000095	0.000098	0.000179	0.000094	0.000095	0.000058	0.000098	0.000185	0.000068	0.000085	0.000088
A10-HTL	0.000501	0.001446	0.000808	0.000728	0.000664	0.000523	0.000668	0.000672	0.000993	0.000745	0.000811	0.000672	0.000447	0.001491	0.000716	0.000373	0.000459	0.000446
A11-HTL	0.000871	0.001055	0.000954	0.001074	0.001168	0.000903	0.001176	0.001182	0.001145	0.001065	0.001110	0.001182	0.000641	0.000938	0.000993	0.000800	0.001007	0.001042
A12-HTL	0.000163	0.000225	0.000732	0.000179	0.000182	0.000144	0.000181	0.000182	0.000200	0.000510	0.000191	0.000182	0.000122	0.000234	0.000551	0.000140	0.000175	0.000182
A1-HTS	0.016633	0.025638	0.032521	0.028003	0.026208	0.020089	0.026376	0.026525	0.026016	0.029287	0.025073	0.026525	0.016448	0.018231	0.028254	0.012827	0.015901	0.014449
A2-HTS	0.016912	0.016729	0.017421	0.016117	0.016867	0.013654	0.016934	0.017030	0.016821	0.017471	0.016354	0.017030	0.011401	0.018433	0.018707	0.015179	0.019066	0.020312
A4-HTS	0.008738	0.006176	0.004754	0.006605	0.007381	0.005457	0.007427	0.007469	0.007105	0.005925	0.006935	0.007469	0.003704	0.003577	0.003659	0.002969	0.003706	0.003518
A5-HTS	0.001321	0.001051	0.001280	0.001047	0.001122	0.002476	0.001124	0.001130	0.001111	0.001226	0.001090	0.001130	0.002663	0.000832	0.001065	0.002018	0.000804	0.000790
A6-HTS	0.000908	0.001249	0.003987	0.001003	0.001018	0.000806	0.001015	0.001021	0.001114	0.002792	0.001065	0.001021	0.000679	0.001292	0.003009	0.000779	0.000971	0.001016
A7-HTS	0.000528	0.000730	0.002375	0.000582	0.000589	0.000467	0.000587	0.000591	0.000647	0.001656	0.000618	0.000591	0.000396	0.000758	0.001789	0.000453	0.000567	0.000591
A8-HTS	0.004374	0.005338	0.014865	0.004501	0.004632	0.004960	0.004624	0.004651	0.004946	0.010759	0.004754	0.004651	0.004629	0.005278	0.011342	0.004469	0.004183	0.004318
A10-HTS	0.012303	0.036711	0.020302	0.018199	0.016514	0.012954	0.016614	0.016708	0.025061	0.018642	0.020379	0.016708	0.011169	0.038081	0.018034	0.009366	0.011534	0.011243
A11-HTS	0.002090	0.002532	0.002289	0.002578	0.002803	0.002168	0.002821	0.002747	0.002555	0.002664	0.002837	0.001539	0.002252	0.002383	0.001920	0.002417	0.002500	0.002500
A12-HTS	0.005584	0.007724	0.025131	0.006160	0.006238	0.004940	0.006216	0.006251	0.006852	0.017522	0.006545	0.006251	0.004187	0.008024	0.018929	0.004795	0.005998	0.006255

	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
A13-HTS	0.003090	0.002707	0.002434	0.002767	0.003010	0.002308	0.003015	0.003033	0.002934	0.002700	0.002903	0.003033	0.001648	0.003105	0.002939	0.002741	0.003506	0.003982
A1-LL	0.000516	0.000802	0.000979	0.000889	0.000829	0.000635	0.000834	0.000839	0.000820	0.000888	0.000792	0.000839	0.000522	0.000560	0.000860	0.000399	0.000494	0.000447
A2-LL	0.000274	0.000286	0.000297	0.000272	0.000284	0.000231	0.000286	0.000287	0.000284	0.000296	0.000275	0.000287	0.000195	0.000306	0.000311	0.000247	0.000309	0.000325
A5-LL	0.000115	0.000088	0.000098	0.000089	0.000096	0.000220	0.000096	0.000096	0.000094	0.000098	0.000093	0.000096	0.000238	0.000069	0.000083	0.000179	0.000067	0.000066
A6-LL	0.000023	0.000028	0.000054	0.000026	0.000028	0.000022	0.000028	0.000028	0.000028	0.000044	0.000027	0.000028	0.000017	0.000027	0.000044	0.000020	0.000024	0.000025
A7-LL	0.000009	0.000012	0.000040	0.000010	0.000010	0.000008	0.000010	0.000010	0.000011	0.000028	0.000010	0.000010	0.000007	0.000013	0.000030	0.000008	0.000009	0.000010
A8-LL	0.000058	0.000071	0.000136	0.000066	0.000070	0.000054	0.000070	0.000070	0.000071	0.000110	0.000069	0.000070	0.000041	0.000067	0.000110	0.000049	0.000061	0.000063
A10-LL	0.000186	0.000488	0.000280	0.000255	0.000236	0.000187	0.000237	0.000239	0.000340	0.000261	0.000282	0.000239	0.000157	0.000496	0.000246	0.000130	0.000160	0.000154
A11-LL	0.000348	0.000422	0.000382	0.000430	0.000467	0.000361	0.000470	0.000473	0.000458	0.000426	0.000444	0.000473	0.000256	0.000375	0.000397	0.000320	0.000403	0.000417
A12-LL	0.000044	0.000061	0.000198	0.000049	0.000049	0.000039	0.000049	0.000049	0.000054	0.000138	0.000052	0.000049	0.000033	0.000063	0.000149	0.000038	0.000047	0.000049
A1-LS	0.004267	0.006432	0.007735	0.006932	0.006536	0.005016	0.006578	0.006615	0.006476	0.007077	0.006476	0.006615	0.004087	0.004620	0.006772	0.003245	0.004023	0.003667
A2-LS	0.003565	0.003401	0.003458	0.003261	0.003420	0.002765	0.003433	0.003453	0.003402	0.003494	0.003312	0.003453	0.002250	0.003684	0.003695	0.002993	0.003762	0.004016
A5-LS	0.000581	0.000454	0.000531	0.000455	0.000487	0.001108	0.000488	0.000491	0.000482	0.000517	0.000473	0.000491	0.001197	0.000355	0.000443	0.000901	0.000345	0.000338
A6-LS	0.000359	0.000495	0.001590	0.000396	0.000402	0.000318	0.000401	0.000403	0.000440	0.001112	0.000421	0.000403	0.000269	0.000512	0.001199	0.000308	0.000385	0.000402
A7-LS	0.000264	0.000365	0.001187	0.000291	0.000295	0.000233	0.000294	0.000295	0.000324	0.000828	0.000309	0.000295	0.000198	0.000379	0.000894	0.000227	0.000283	0.000295
A8-LS	0.001671	0.002235	0.007026	0.001807	0.001837	0.001598	0.001831	0.001841	0.002004	0.004938	0.001917	0.001841	0.001404	0.002295	0.005306	0.001514	0.001738	0.001808
A10-LS	0.002308	0.006795	0.003783	0.003399	0.003094	0.002436	0.003113	0.003130	0.004648	0.003481	0.003793	0.003130	0.002087	0.007021	0.003353	0.001742	0.002145	0.002087
A11-LS	0.004878	0.005907	0.005342	0.006016	0.006541	0.005060	0.006583	0.006620	0.006410	0.005962	0.006217	0.006620	0.003590	0.005255	0.005560	0.004481	0.005639	0.005834
A12-LS	0.000629	0.000870	0.002830	0.000694	0.000702	0.000556	0.000700	0.000704	0.000772	0.001973	0.000737	0.000704	0.000471	0.000903	0.002131	0.000540	0.000675	0.000704
A1-OL	0.009774	0.015393	0.021529	0.016843	0.015577	0.011924	0.015676	0.015765	0.015549	0.018855	0.014947	0.015765	0.009202	0.010890	0.018311	0.007449	0.009227	0.008336
A2-OL	0.001817	0.002199	0.002339	0.002068	0.002142	0.001766	0.002152	0.002165	0.002149	0.002298	0.002078	0.002165	0.001547	0.002390	0.002443	0.001912	0.002390	0.002436
A3-OL	0.003489	0.002466	0.001898	0.002637	0.002947	0.002179	0.002965	0.002982	0.002837	0.002366	0.002769	0.002982	0.001479	0.001428	0.001461	0.001186	0.001480	0.001405
A5-OL	0.000581	0.000454	0.000531	0.000455	0.000487	0.001108	0.000488	0.000491	0.000482	0.000517	0.000473	0.000491	0.001197	0.000355	0.000443	0.000901	0.000345	0.000338
A6-OL	0.000064	0.000087	0.000265	0.000071	0.000073	0.000058	0.000073	0.000073	0.000079	0.000188	0.000076	0.000073	0.000048	0.000089	0.000201	0.000055	0.000069	0.000072
A7-OL	0.000066	0.000091	0.000297	0.000073	0.000074	0.000058	0.000073	0.000074	0.000081	0.000207	0.000077	0.000074	0.000049	0.000095	0.000224	0.000057	0.000071	0.000074
A8-OL	0.000558	0.000432	0.000553	0.000428	0.000457	0.001084	0.000458	0.000460	0.000454	0.000518	0.000446	0.000460	0.001182	0.000339	0.000453	0.000883	0.000322	0.000314
A9-OL	0.047492	0.076988	0.084015	0.097410	0.087728	0.066375	0.088308	0.088807	0.085566	0.076705	0.083018	0.088807	0.045966	0.046343	0.078835	0.036621	0.045280	0.039098
A10-OL	0.006755	0.020704	0.011309	0.010089	0.009100	0.007089	0.009155	0.009207	0.014078	0.010341	0.011372	0.009207	0.006186	0.021636	0.010088	0.005234	0.006449	0.006307
A11-OL	0.000755	0.000914	0.000827	0.000931	0.001012	0.000783	0.001019	0.001025	0.000992	0.000923	0.000962	0.001025	0.000556	0.000813	0.000860	0.000693	0.000873	0.000903
A12-OL	0.000418	0.000578	0.001880	0.000461	0.000467	0.000370	0.000465	0.000468	0.000513	0.001311	0.000490	0.000468	0.000313	0.000600	0.001416	0.000359	0.000449	0.000468
A1-OS	0.008072	0.012359	0.015731	0.013320	0.012658	0.009740	0.012739	0.012811	0.012583	0.014295	0.012122	0.012811	0.009422	0.009105	0.013715	0.006565	0.008153	0.007546
A2-OS	0.006010	0.006472	0.006782	0.006159	0.006416	0.005238	0.006444	0.006481	0.006414	0.006742	0.006222	0.006481	0.004458	0.007063	0.007180	0.005724	0.007173	0.007569
A5-OS	0.002929	0.002301	0.002752	0.002297	0.002462	0.005558	0.002466	0.002480	0.002435	0.002655	0.002392	0.002480	0.006001	0.001808	0.002291	0.004525	0.001751	0.001715
A6-OS	0.000106	0.000142	0.000414	0.000118	0.000121	0.000095	0.000121	0.000121	0.000130	0.000296	0.000124	0.000121	0.000078	0.000144	0.000316	0.000090	0.000113	0.000118
A7-OS	0.000132	0.000182	0.000594	0.000146	0.000147	0.000117	0.000147	0.000148	0.000162	0.000414	0.000155	0.000148	0.000099	0.000190	0.000447	0.000113	0.000142	0.000148
A8-OS	0.000879	0.001065	0.002971	0.000897	0.000923	0.001018	0.000921	0.000926	0.000986	0.002149	0.000948	0.000926	0.000961	0.001051	0.002265	0.000914	0.000831	0.000857
A10-OS	0.004177	0.012404	0.006902	0.006198	0.005640	0.004446	0.005674	0.005706	0.008472	0.006348	0.006914	0.005706	0.003807	0.012817	0.006117	0.003173	0.003906	0.003801
A11-OS	0.002311	0.002799	0.002531	0.002851	0.003099	0.002397	0.003119	0.003137	0.003037	0.002825	0.002946	0.003137	0.001701	0.002490	0.002634	0.002123	0.002672	0.002764
A12-OS	0.001803	0.002493	0.008113	0.001989	0.002014	0.001595	0.002007	0.002018	0.002212	0.005657	0.002113	0.002018	0.001352	0.002590	0.006111	0.001548	0.001936	0.002019
A14	0.092755	0.114623	0.121255	0.137815	0.128244	0.098015	0.129061	0.129791	0.125643	0.117332	0.121816	0.129791	0.068901	0.072820	0.108538	0.057368	0.070721	0.061238
A15	0.371036	0.368651	0.423266	0.385910	0.405215	0.304433	0.394114	0.396341	0.389231	0.396008	0.430110	0.396341	0.253560	0.366959	0.406793	0.303465	0.383073	0.412692
C-1	0.225007	0.359328	0.376339	0.432206	0.391348	0.296733	0.393917	0.396143	0.382169	0.347169	0.370681	0.396143	0.207177	0.222604	0.349527	0.166159	0.205352	0.177647
C-2	0.046502	0.079694	0.291303	0.055604	0.054922	0.044328	0.055201	0.055513	0.065171	0.225366	0.058479	0.055513	0.038115	0.084469	0.211136	0.042488	0.052964	0.054604

	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
C-3	0.220887	0.381135	0.298319	0.403489	0.450509	0.337032	0.453565	0.456128	0.434878	0.368542	0.423442	0.456128	0.228657	0.204401	0.212061	0.167348	0.206689	0.174013
C-4	0.018010	0.024208	0.121041	0.072311	0.020080	0.016200	0.020180	0.020294	0.021792	0.026425	0.020320	0.020294	0.013718	0.025190	0.171382	0.015908	0.019870	0.020590
C-5	0.032345	0.053641	0.054344	0.062293	0.058325	0.044385	0.058708	0.059039	0.056992	0.051999	0.055276	0.059039	0.031084	0.033598	0.048983	0.025172	0.031076	0.026669
C-6	0.008501	0.007111	0.007310	0.007038	0.007433	0.005940	0.007478	0.007520	0.007401	0.007517	0.007144	0.007520	0.004449	0.007895	0.008018	0.006723	0.008473	0.009091
C-7	0.025806	0.025083	0.040377	0.063129	0.020997	0.018477	0.021096	0.021215	0.022486	0.033237	0.021234	0.021215	0.014699	0.027823	0.042043	0.020619	0.025505	0.022673
C-8	0.035156	0.052146	0.048449	0.052856	0.049251	0.037663	0.049564	0.049845	0.048338	0.046386	0.046828	0.049845	0.027273	0.036345	0.043142	0.022343	0.027566	0.024047
C-9	0.001491	0.001059	0.001053	0.001047	0.001108	0.000877	0.001115	0.001121	0.001102	0.001095	0.001063	0.001121	0.000652	0.001008	0.001052	0.000834	0.001042	0.001076
C-10	0.053062	0.045879	0.042651	0.046603	0.050457	0.039201	0.050758	0.051045	0.049574	0.046823	0.048110	0.051045	0.028126	0.031009	0.033908	0.024839	0.030463	0.026300
C-11	0.001660	0.002533	0.006953	0.007116	0.001861	0.001484	0.001871	0.001882	0.002147	0.005599	0.001947	0.001882	0.001241	0.002570	0.006900	0.001334	0.001663	0.001701
C-12	0.113269	0.157062	0.145695	0.152137	0.163241	0.128665	0.164262	0.165190	0.161198	0.156503	0.156027	0.165190	0.237295	0.139992	0.140269	0.114695	0.143519	0.142756
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.096544	0.124540	0.139964	0.119471	0.123410	0.101615	0.124031	0.124732	0.124547	0.135918	0.120104	0.124732	0.093737	0.140252	0.147994	0.117040	0.146108	0.151948
C-15	0.061768	0.043762	0.042998	0.044087	0.047091	0.036805	0.047189	0.047455	0.046365	0.045204	0.045622	0.047455	0.027255	0.050280	0.049657	0.043535	0.055286	0.061583
C-16	0.008600	0.005530	0.005061	0.005635	0.006084	0.004676	0.006124	0.006158	0.005977	0.005572	0.005784	0.006158	0.003374	0.003636	0.004045	0.002859	0.003499	0.003149
C-17	0.012528	0.028479	0.021239	0.020532	0.020593	0.018888	0.020731	0.020848	0.020181	0.020882	0.019519	0.020848	0.013018	0.023096	0.017070	0.008365	0.010167	0.009065
C-18	0.061915	0.043762	0.033681	0.046800	0.052293	0.038661	0.052622	0.052919	0.050339	0.041982	0.049137	0.052919	0.026241	0.025346	0.025928	0.021037	0.026258	0.024927
C-19	0.077394	0.107047	0.348313	0.085378	0.086460	0.068464	0.086152	0.086638	0.094967	0.242858	0.090710	0.086638	0.058033	0.111205	0.262348	0.066453	0.083125	0.086689
C-20	0.036782	0.041057	0.037116	0.041989	0.045636	0.035281	0.045934	0.046193	0.044706	0.041479	0.043339	0.046193	0.025180	0.035669	0.036035	0.030303	0.038039	0.039115
C-21	0.038998	0.026957	0.026007	0.027549	0.029615	0.082457	0.029648	0.029816	0.029004	0.027639	0.028681	0.029816	0.091700	0.019625	0.021857	0.066483	0.019357	0.018472
C-22	0.103964	0.320506	0.174543	0.155532	0.140078	0.108918	0.140922	0.141718	0.217757	0.159444	0.175614	0.141718	0.095329	0.335550	0.155863	0.080860	0.099638	0.097526
C-23	0.261836	0.263962	0.239072	0.269309	0.292026	0.225597	0.293929	0.295590	0.286339	0.266100	0.277443	0.295590	0.161267	0.247773	0.246764	0.212084	0.267596	0.285001
C-24	0.068714	0.051247	0.051191	0.051127	0.054187	0.042855	0.054524	0.054832	0.053716	0.053397	0.051892	0.054832	0.031922	0.060127	0.060014	0.051973	0.065812	0.073599
C-25	0.073559	0.089089	0.080558	0.090733	0.098650	0.076302	0.099280	0.099841	0.096670	0.089915	0.093755	0.099841	0.054140	0.079251	0.083846	0.067574	0.085048	0.087985
C-26	0.017205	0.015071	0.013551	0.015409	0.016763	0.012853	0.016791	0.016886	0.016337	0.015036	0.016164	0.016886	0.009178	0.017288	0.016368	0.015265	0.019525	0.022173
C-27	0.040486	0.053442	0.133003	0.065474	0.059002	0.035981	0.045661	0.045919	0.049176	0.076511	0.100775	0.045919	0.060371	0.059060	0.100015	0.039408	0.049665	0.054093
Ld-BL	0.036465	0.055018	0.072868	0.059387	0.056207	0.044021	0.056562	0.056882	0.055993	0.065460	0.053896	0.056882	0.040028	0.040141	0.062727	0.029248	0.035403	0.032638
Ld-BS	0.062863	0.095402	0.125420	0.102636	0.097441	0.077186	0.098054	0.098608	0.097055	0.113022	0.093443	0.098608	0.073171	0.070347	0.108402	0.052249	0.062519	0.057871
Ld-CL	0.010557	0.015796	0.021798	0.017266	0.016121	0.012965	0.016222	0.016314	0.016074	0.019252	0.015466	0.016314	0.010422	0.011180	0.018532	0.008292	0.009611	0.008734
Ld-CS	0.021573	0.032822	0.043909	0.035404	0.033451	0.026559	0.033662	0.033852	0.033342	0.039301	0.032090	0.033852	0.024302	0.024039	0.037780	0.017778	0.021166	0.019520
Ld-TL	0.012434	0.019008	0.026180	0.020695	0.019385	0.015185	0.019508	0.019618	0.019338	0.023184	0.018600	0.019618	0.012811	0.013659	0.022350	0.009840	0.011861	0.010846
Ld-TS	0.033245	0.503585	0.070066	0.112092	0.051487	0.204613	0.051811	0.052103	0.051356	0.061908	0.049414	0.052103	0.039168	0.037496	0.058190	0.027652	0.033221	0.030814
Ld-HTL	0.001745	0.002699	0.003770	0.002941	0.002741	0.002166	0.002758	0.002774	0.002737	0.003317	0.002632	0.002774	0.001769	0.468876	0.008210	0.147739	0.001665	0.001517
Ld-HTS	0.006968	0.010604	0.013428	0.011556	0.010836	0.008536	0.010905	0.010967	0.010761	0.012105	0.010372	0.010967	0.007080	0.007562	0.011662	0.005517	0.006598	0.006006
Ld-LL	0.000260	0.000390	0.000475	0.000431	0.000404	0.000332	0.000406	0.000409	0.000400	0.000432	0.000386	0.000409	0.000282	0.000273	0.000417	0.000215	0.000242	0.000220
Ld-LS	0.001437	0.002105	0.002523	0.002258	0.002138	0.001751	0.002151	0.002164	0.002120	0.002313	0.002046	0.002164	0.001471	0.001521	0.002207	0.001162	0.001326	0.001213
Ld-OL	0.004897	0.007470	0.010324	0.008151	0.007581	0.005911	0.007629	0.007672	0.007563	0.009094	0.007274	0.007672	0.004606	0.005293	0.008781	0.003731	0.004508	0.004087
Ld-OS	0.004180	0.006064	0.007675	0.006497	0.006220	0.005327	0.006257	0.006293	0.006183	0.007002	0.005964	0.006293	0.005240	0.004503	0.006685	0.003721	0.004052	0.003772
Ld-LSD	0.002933	0.017496	0.005978	0.004884	0.004614	0.003547	0.004643	0.004670	0.004595	0.005367	0.004423	0.004670	0.003258	0.003313	0.005162	0.002356	0.002924	0.002695
Lb-BL	0.012944	0.017746	0.028601	0.015013	0.015073	0.012246	0.015118	0.015204	0.016248	0.023166	0.015290	0.015204	0.010268	0.017581	0.024202	0.011256	0.013697	0.014187
Lb-BS	0.062441	0.091963	0.149907	0.073677	0.073754	0.062007	0.073931	0.074349	0.081526	0.119469	0.076052	0.074349	0.053882	0.091828	0.124408	0.056225	0.066305	0.068153
Lb-CL	0.005852	0.007523	0.011830	0.006418	0.006591	0.005474	0.006609	0.006647	0.007025	0.009761	0.006647	0.006647	0.004439	0.007469	0.010117	0.005096	0.006064	0.006357
Lb-CS	0.027026	0.039938	0.062310	0.032194	0.031999	0.026009	0.032086	0.032267	0.035432	0.050141	0.032987	0.032267	0.022160	0.039333	0.051987	0.031223	0.027987	0.028714
Lb-TL	0.935240	0.011111	0.015352	0.009980	0.009845	0.007967	0.009886	0.009942	0.010464	0.013077	0.009865	0.009942	0.006524	0.009934	0.013084	0.006358	0.007575	0.007583



	A12-TL	A1-TS	A2-TS	A3-TS	A4-TS	A5-TS	A6-TS	A7-TS	A8-TS	A10-TS	A11-TS	A12-TS	A13-TS	A1-HTL	A2-HTL	A5-HTL	A6-HTL	A7-HTL
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Lb-TS	0.057338	0.237306	0.314003	0.090505	0.616871	0.220247	1.058256	1.069884	0.646322	0.524165	0.731941	1.069884	0.227965	0.081682	0.096070	0.046204	0.055006	0.055731
Lb-HTL	0.000755	0.001091	0.001598	0.000925	0.000947	0.000752	0.000950	0.000956	0.001016	0.001343	0.000956	0.000956	0.000595	0.017412	0.102248	0.026184	0.573751	1.002945
Lb-HTS	0.034095	0.050072	0.067866	0.038214	0.038075	0.030676	0.038189	0.038404	0.043334	0.055869	0.039824	0.038404	0.025297	0.049358	0.056953	0.026609	0.032283	0.033150
Lb-LL	0.000278	0.000358	0.000395	0.000305	0.000313	0.000256	0.000314	0.000316	0.000334	0.000364	0.000313	0.000316	0.000205	0.000351	0.000367	0.000235	0.000282	0.000295
Lb-LS	0.010824	0.014447	0.019832	0.012338	0.012607	0.010141	0.012653	0.012724	0.013469	0.016989	0.012696	0.012724	0.008039	0.014029	0.017319	0.009151	0.011173	0.011546
Lb-OL	0.002575	0.002657	0.002840	0.002396	0.002499	0.001973	0.002512	0.002526	0.002590	0.002727	0.002462	0.002526	0.001509	0.002773	0.002863	0.002050	0.002565	0.002793
Lb-OS	0.006778	0.009570	0.015881	0.007918	0.007938	0.006808	0.007956	0.008001	0.008650	0.012693	0.008122	0.008001	0.005975	0.009349	0.013136	0.006044	0.006951	0.007110
Lb-HRD	0.161959	0.186654	0.204476	0.123737	0.118816	0.188138	0.119107	0.119780	0.128170	0.216227	0.129931	0.119780	0.101954	0.270473	0.166873	0.292743	0.370244	0.081999
K-BL	0.031986	0.041368	0.039835	0.037376	0.037477	0.031118	0.037695	0.037908	0.039553	0.038805	0.037167	0.037908	0.026098	0.034972	0.035497	0.023006	0.026326	0.025756
K-BS	0.041452	0.051496	0.061460	0.049057	0.049782	0.045549	0.050017	0.050300	0.050536	0.057183	0.048580	0.050300	0.041780	0.049979	0.058083	0.042265	0.046674	0.047642
K-CL	0.013660	0.015512	0.017290	0.016120	0.016463	0.014326	0.016559	0.016652	0.016330	0.016952	0.015776	0.016652	0.011461	0.012075	0.015468	0.010659	0.011495	0.011287
K-CS	0.010066	0.013162	0.017179	0.012582	0.012489	0.012009	0.012548	0.012619	0.012841	0.015296	0.012263	0.012619	0.011124	0.011510	0.015032	0.009766	0.009781	0.009680
K-TL	0.007832	0.008554	0.008772	0.008382	0.008634	0.007332	0.008683	0.008732	0.008761	0.008725	0.008376	0.008732	0.005869	0.006551	0.007563	0.005112	0.005564	0.005397
K-TS	0.023592	0.105410	0.095922	0.774093	0.465730	0.348315	0.032705	0.027240	0.369705	0.160698	0.261020	0.027240	0.233023	0.027036	0.028662	0.018208	0.019559	0.019453
K-HTL	0.001092	0.001392	0.001475	0.001353	0.001383	0.001240	0.001391	0.001398	0.001401	0.001450	0.001343	0.001398	0.001038	0.065022	0.316402	0.366904	0.144000	0.001154
K-HTS	0.013156	0.014448	0.016194	0.012730	0.013411	0.011410	0.013466	0.013542	0.014063	0.015202	0.013332	0.013542	0.009145	0.013079	0.014191	0.009425	0.010651	0.010982
K-LL	0.000386	0.000469	0.000476	0.000436	0.000458	0.000405	0.000461	0.000463	0.000468	0.000475	0.000447	0.000463	0.000334	0.000444	0.000463	0.000365	0.000410	0.000422
K-LS	0.003020	0.003820	0.004929	0.003414	0.003596	0.003080	0.003612	0.003632	0.003732	0.003556	0.003632	0.002474	0.003676	0.002474	0.002795	0.003225	0.003344	0.003344
K-OL	0.008810	0.015705	0.011844	0.011380	0.010936	0.008926	0.011002	0.011064	0.013110	0.011331	0.011660	0.011064	0.007242	0.014451	0.010589	0.006352	0.007330	0.007110
K-OS	0.005392	0.007173	0.007134	0.006089	0.006267	0.006283	0.006297	0.006333	0.006698	0.006848	0.006288	0.006333	0.005641	0.006916	0.006708	0.005534	0.005484	0.005612
B-L	0.089003	0.121016	0.147974	0.118075	0.115348	0.092663	0.116006	0.116662	0.118372	0.134189	0.112696	0.116662	0.080406	0.103155	0.132340	0.072820	0.087375	0.086896
B-S	0.201139	0.273730	0.373716	0.251583	0.247018	0.216624	0.248150	0.249552	0.256305	0.327867	0.245015	0.249552	0.188367	0.267680	0.332494	0.206529	0.246602	0.217305
C-L	0.034587	0.050894	0.056665	0.044752	0.044064	0.036609	0.044310	0.044560	0.044312	0.051372	0.042590	0.044560	0.029569	0.036886	0.050998	0.029239	0.033797	0.034017
C-S	0.082971	0.110655	0.150068	0.098126	0.095543	0.087713	0.095963	0.096505	0.100186	0.132301	0.095831	0.096505	0.071373	0.115894	0.134499	0.092454	0.112205	0.088114
T-L	0.957890	0.040457	0.052232	0.040781	0.039646	0.031926	0.039869	0.040094	0.040355	0.046886	0.038564	0.040094	0.026324	0.033998	0.046525	0.024798	0.029510	0.029471
T-S	0.167657	0.904125	0.542932	1.016803	1.173021	0.829497	1.181822	1.188499	1.108913	0.812602	1.084097	1.188499	0.532085	0.236091	0.243354	0.186390	0.227567	0.153507
HT-L	0.004851	0.006214	0.007915	0.006229	0.006129	0.005008	0.006164	0.006198	0.006211	0.007197	0.005949	0.006198	0.004047	0.553089	0.428526	0.542419	0.721462	1.008090
HT-S	0.079895	0.102408	0.127422	0.081670	0.080954	0.077357	0.081248	0.081708	0.088013	0.114462	0.083460	0.081708	0.056733	0.113195	0.112048	0.086758	0.106965	0.073974
Lo-L	0.001239	0.001435	0.001590	0.001380	0.001387	0.001167	0.001395	0.001403	0.001416	0.001505	0.001353	0.001403	0.000958	0.001628	0.001751	0.001324	0.001595	0.001781
Lo-S	0.035814	0.042569	0.051642	0.033373	0.033222	0.036876	0.033340	0.033528	0.035231	0.049268	0.034306	0.033528	0.024295	0.053670	0.046797	0.049442	0.061834	0.033121
O-L	0.018770	0.030680	0.027796	0.024444	0.023568	0.018826	0.023710	0.023844	0.025806	0.025866	0.023847	0.023844	0.014982	0.025731	0.025645	0.014884	0.017913	0.018020
O-S	0.034964	0.041203	0.050892	0.034158	0.033839	0.035936	0.033974	0.034166	0.035673	0.047420	0.034446	0.034166	0.027318	0.052217	0.049385	0.047277	0.057271	0.040269
COM	0.068807	0.053873	0.049677	0.053574	0.057600	0.044748	0.057969	0.058297	0.056701	0.053925	0.054869	0.058297	0.032469	0.059456	0.058153	0.051643	0.065654	0.073867
FA1	0.103026	0.070842	0.079544	0.067524	0.068772	0.056247	0.069164	0.069555	0.069751	0.076168	0.066879	0.069555	0.044738	0.184588	0.166284	0.168434	0.218588	0.279603
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.046266	0.031813	0.035721	0.030323	0.030883	0.025259	0.031060	0.031235	0.031323	0.034205	0.030033	0.031235	0.020090	0.082893	0.074673	0.075639	0.098162	0.125561
FA4	0.108250	0.083709	0.092476	0.080050	0.082517	0.068150	0.082988	0.083457	0.083217	0.090347	0.080092	0.083457	0.052665	0.169901	0.157110	0.153569	0.197898	0.241207
FA5	0.026781	0.023980	0.024078	0.023758	0.025166	0.020050	0.025321	0.025464	0.024993	0.025039	0.024142	0.025464	0.014908	0.032062	0.030997	0.028177	0.035904	0.041126
FA6	0.017158	0.020623	0.022424	0.020176	0.020990	0.017005	0.021113	0.021233	0.021034	0.022256	0.020268	0.021233	0.013160	0.020420	0.022163	0.016827	0.020878	0.021091
FA7	0.046266	0.031813	0.035721	0.030323	0.030883	0.025259	0.031060	0.031235	0.031323	0.034205	0.030033	0.031235	0.020090	0.082893	0.074673	0.075639	0.098162	0.125561
FA8	0.296731	0.190817	0.174628	0.194431	0.209913	0.161327	0.211280	0.212474	0.206233	0.192250	0.199553	0.212474	0.116409	0.125467	0.139552	0.098646	0.120717	0.108647
FA9	0.006629	0.005190	0.004786	0.005161	0.005549	0.004311	0.005585	0.005616	0.005463	0.005195	0.005286	0.005616	0.003128	0.005728	0.005603	0.004975	0.006325	0.007117

	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
A1-BL	0.089695	0.128717	0.074187	0.069366	0.122328	0.152987	0.124911	0.094539	0.122674	0.122394	0.122652	0.138299	0.122861	0.124760	0.116770	0.098616	0.117486	0.071844
A2-BL	0.021953	0.025020	0.025083	0.026160	0.032683	0.029021	0.032785	0.025513	0.032129	0.032011	0.031997	0.030366	0.031988	0.032720	0.030880	0.030570	0.028995	0.024188
A3-BL	0.007101	0.007369	0.006680	0.006704	0.009085	0.008561	0.010364	0.007874	0.010199	0.010192	0.010143	0.009343	0.010122	0.010357	0.009735	0.007262	0.007156	0.006240
A5-BL	0.002771	0.003297	0.002672	0.002589	0.003492	0.004435	0.003680	0.008917	0.003615	0.003611	0.003614	0.003959	0.003635	0.003673	0.009487	0.003466	0.003922	0.010177
A6-BL	0.000665	0.001216	0.000593	0.000508	0.000752	0.002306	0.000599	0.000464	0.000587	0.000586	0.000602	0.001370	0.000619	0.000597	0.000578	0.000716	0.001279	0.000449
A7-BL	0.000652	0.001201	0.000578	0.000492	0.000737	0.002290	0.000582	0.000451	0.000571	0.000569	0.000585	0.001354	0.000603	0.000580	0.000562	0.000696	0.001259	0.000431
A8-BL	0.001851	0.002996	0.001705	0.001534	0.002164	0.005272	0.001920	0.002635	0.001884	0.001881	0.001911	0.003422	0.001947	0.001915	0.002974	0.002113	0.003265	0.002869
A9-BL	0.086618	0.105813	0.066961	0.063000	0.114824	0.116880	0.129754	0.098294	0.127630	0.127478	0.127040	0.122797	0.126772	0.129662	0.121250	0.086629	0.091350	0.072001
A10-BL	0.052890	0.018284	0.028220	0.012045	0.046973	0.021395	0.017637	0.013879	0.017337	0.017310	0.020136	0.019385	0.022328	0.017620	0.016732	0.042758	0.016744	0.010953
A11-BL	0.003156	0.003427	0.003618	0.003820	0.003542	0.003533	0.003807	0.002978	0.003769	0.003782	0.003753	0.003667	0.003742	0.003812	0.003616	0.003620	0.003640	0.003183
A12-BL	0.007168	0.013215	0.006359	0.005417	0.008103	0.025195	0.006403	0.004962	0.006276	0.006262	0.006439	0.014899	0.006628	0.006382	0.006186	0.007660	0.013846	0.004743
A1-BS	0.145318	0.206066	0.121521	0.114280	0.198253	0.244806	0.203498	0.153979	0.199845	0.199383	0.199749	0.222995	0.200042	0.203250	0.190230	0.160276	0.189012	0.117551
A2-BS	0.075671	0.085979	0.087010	0.090881	0.109378	0.099658	0.113217	0.087424	0.110943	0.110530	0.110480	0.104561	0.110450	0.112989	0.106624	0.102892	0.099953	0.083651
A3-BS	0.000744	0.000772	0.000700	0.000702	0.000952	0.000897	0.001086	0.000825	0.001069	0.001068	0.001063	0.000979	0.001060	0.001085	0.001020	0.000761	0.000750	0.000654
A5-BS	0.006902	0.008216	0.006657	0.006450	0.008698	0.011054	0.009165	0.022182	0.009003	0.008992	0.008999	0.009863	0.009053	0.009147	0.023603	0.008633	0.009773	0.025317
A6-BS	0.001994	0.003647	0.001778	0.001524	0.002256	0.006917	0.001797	0.001392	0.001761	0.001758	0.001806	0.004111	0.001857	0.001791	0.001735	0.002147	0.003836	0.001346
A7-BS	0.002281	0.004205	0.002023	0.001724	0.002578	0.008017	0.002037	0.001579	0.001997	0.001993	0.002049	0.004741	0.002109	0.002031	0.001968	0.002437	0.004406	0.001509
A8-BS	0.006707	0.011254	0.006108	0.005411	0.007784	0.020295	0.006712	0.008479	0.006584	0.006573	0.006697	0.012816	0.006841	0.006693	0.009686	0.007512	0.012111	0.009067
A10-BS	0.089354	0.031755	0.047922	0.020830	0.081625	0.037171	0.030722	0.024530	0.030203	0.030157	0.034880	0.033721	0.038545	0.030693	0.029147	0.073983	0.029092	0.019080
A11-BS	0.006370	0.006916	0.007302	0.007709	0.007149	0.007130	0.007683	0.006010	0.007606	0.007632	0.007574	0.007400	0.007552	0.007693	0.007297	0.007305	0.007347	0.006424
A12-BS	0.025674	0.047335	0.022778	0.019404	0.029025	0.090244	0.022936	0.017772	0.022480	0.022431	0.023062	0.053365	0.023741	0.022860	0.022159	0.027437	0.049594	0.016990
A13-BS	0.002051	0.002367	0.003152	0.003471	0.002790	0.002471	0.003316	0.002442	0.003235	0.003215	0.003214	0.002829	0.003219	0.003303	0.003106	0.009235	0.010057	0.009027
A1-CL	0.024530	0.036761	0.019447	0.017770	0.033320	0.043751	0.033428	0.025327	0.032836	0.032766	0.032868	0.038478	0.032954	0.033390	0.031254	0.026563	0.032966	0.018919
A2-CL	0.006224	0.007090	0.006970	0.007238	0.009451	0.008308	0.009369	0.007311	0.009181	0.009146	0.009143	0.008685	0.009139	0.009351	0.008819	0.008882	0.008357	0.006965
A3-CL	0.002637	0.002737	0.002481	0.002490	0.003374	0.003180	0.003850	0.002925	0.003788	0.003786	0.003767	0.003470	0.003759	0.003847	0.003616	0.002697	0.002658	0.002318
A5-CL	0.002123	0.002546	0.002045	0.001978	0.002673	0.003457	0.002807	0.006765	0.002758	0.002754	0.002757	0.003054	0.002774	0.002802	0.007201	0.002649	0.003020	0.007716
A6-CL	0.000143	0.000259	0.000129	0.000111	0.000162	0.000489	0.000131	0.000101	0.000128	0.000128	0.000131	0.000292	0.000135	0.000130	0.000126	0.000156	0.000274	0.000099
A7-CL	0.000521	0.000961	0.000463	0.000394	0.000589	0.001832	0.000466	0.000361	0.000456	0.000455	0.000468	0.001084	0.000482	0.000464	0.000450	0.000557	0.001007	0.000345
A8-CL	0.001113	0.001801	0.001029	0.000927	0.001301	0.003165	0.001154	0.001550	0.001133	0.001131	0.001149	0.002055	0.001171	0.001151	0.001754	0.001275	0.001966	0.001689
A9-CL	0.042945	0.052468	0.033200	0.031231	0.057046	0.058035	0.064499	0.048838	0.063435	0.063354	0.063142	0.061024	0.063011	0.064451	0.060260	0.042983	0.045431	0.035716
A10-CL	0.011775	0.004186	0.006314	0.002743	0.010784	0.004898	0.004042	0.003234	0.003974	0.003968	0.004591	0.004441	0.005074	0.004038	0.003835	0.009772	0.003832	0.002511
A11-CL	0.005279	0.005732	0.006052	0.006390	0.005925	0.005909	0.006368	0.004982	0.006304	0.006326	0.006278	0.006133	0.006259	0.006376	0.006048	0.006055	0.006089	0.005324
A12-CL	0.002776	0.005118	0.002463	0.002098	0.003138	0.009757	0.002480	0.001922	0.002431	0.002425	0.002493	0.005770	0.002567	0.002472	0.002396	0.002967	0.005362	0.001837
A1-CS	0.054675	0.078714	0.045208	0.042242	0.074520	0.093597	0.075978	0.057510	0.074618	0.074448	0.074612	0.084397	0.074745	0.075886	0.071029	0.060087	0.071832	0.043717
A2-CS	0.018810	0.021380	0.021936	0.022975	0.026825	0.024567	0.027920	0.021536	0.027364	0.027266	0.027249	0.025785	0.027246	0.027864	0.026311	0.025047	0.024412	0.020435
A3-CS	0.000271	0.000281	0.000254	0.000255	0.000346	0.000326	0.000395	0.000300	0.000389	0.000388	0.000386	0.000356	0.000386	0.000395	0.000371	0.000277	0.000273	0.000238
A5-CS	0.002771	0.003297	0.002672	0.002589	0.003492	0.004435	0.003680	0.008917	0.003615	0.003611	0.003614	0.003959	0.003635	0.003673	0.009487	0.003466	0.003922	0.010177
A6-CS	0.000476	0.000862	0.000427	0.000368	0.000539	0.001626	0.000433	0.000335	0.000424	0.000423	0.000435	0.000972	0.000447	0.000431	0.000418	0.000516	0.000911	0.000328
A7-CS	0.001303	0.002403	0.001156	0.000985	0.001473	0.004581	0.001164	0.000902	0.001141	0.001139	0.001171	0.002709	0.001205	0.001160	0.001125	0.001393	0.002517	0.000862
A8-CS	0.003284	0.005541	0.003009	0.002673	0.003791	0.010005	0.003252	0.003667	0.003191	0.003186	0.003247	0.006289	0.003317	0.003243	0.004258	0.003699	0.005982	0.003906
A10-CS	0.033410	0.011733	0.017880	0.007713	0.030126	0.013733	0.011344	0.008996	0.011152	0.011134	0.012908	0.012455	0.014285	0.011333	0.010762	0.027358	0.010749	0.007045
A11-CS	0.002525	0.002741	0.002895	0.003056	0.002834	0.002826	0.003046	0.002383	0.003015	0.003025	0.003002	0.002933	0.002994	0.003049	0.002893	0.002956	0.002912	0.002546
A12-CS	0.010231	0.018862	0.009077	0.007732	0.011566	0.035960	0.009139	0.007082	0.008958	0.008938	0.009190	0.021265	0.009460	0.009109	0.008830	0.010933	0.019762	0.006770

	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
A1-TL	0.030202	0.044718	0.024389	0.022489	0.040843	0.053235	0.041350	0.031322	0.040615	0.040527	0.040643	0.047124	0.040739	0.041302	0.038661	0.032756	0.040434	0.023628
A2-TL	0.002629	0.003003	0.003151	0.003316	0.003769	0.003374	0.003808	0.002961	0.003734	0.003723	0.003719	0.003531	0.003720	0.003801	0.003596	0.003416	0.003244	0.002704
A3-TL	0.002130	0.002211	0.002004	0.002011	0.002725	0.002568	0.003109	0.002362	0.003060	0.003058	0.003043	0.002803	0.003036	0.003107	0.002920	0.002179	0.002147	0.001872
A4-TL	0.000426	0.000442	0.000401	0.000402	0.000545	0.000514	0.000622	0.000472	0.000612	0.000612	0.000609	0.000561	0.000607	0.000621	0.000584	0.000436	0.000429	0.000374
A5-TL	0.001029	0.001213	0.000994	0.000964	0.001299	0.001614	0.001375	0.003360	0.001350	0.001349	0.001349	0.001459	0.001357	0.001372	0.003572	0.001290	0.001447	0.003837
A6-TL	0.000072	0.000127	0.000065	0.000057	0.000081	0.000237	0.000067	0.000052	0.000065	0.000065	0.000067	0.000143	0.000069	0.000066	0.000064	0.000079	0.000136	0.000052
A7-TL	0.000130	0.000240	0.000116	0.000098	0.000147	0.000458	0.000116	0.000090	0.000114	0.000114	0.000117	0.000271	0.000121	0.000116	0.000112	0.000139	0.000252	0.000086
A8-TL	0.000883	0.001452	0.000819	0.000738	0.001022	0.002575	0.000894	0.001021	0.000878	0.000876	0.000891	0.001649	0.000909	0.000892	0.001182	0.001012	0.001586	0.001105
A9-TL	0.041913	0.051133	0.032395	0.030493	0.055301	0.056334	0.062421	0.047337	0.061416	0.061355	0.061131	0.059091	0.060999	0.062382	0.058355	0.041842	0.043871	0.034803
A10-TL	0.019973	0.006858	0.010645	0.004525	0.017600	0.008025	0.006615	0.005183	0.006502	0.006492	0.007562	0.007271	0.008392	0.006609	0.006275	0.016040	0.006281	0.004108
A11-TL	0.002353	0.002554	0.002697	0.002848	0.002641	0.002634	0.002838	0.002220	0.002810	0.002819	0.002798	0.002733	0.002789	0.002842	0.002695	0.002698	0.002714	0.002373
A12-TL	0.001759	0.003244	0.001561	0.001330	0.001989	0.006184	0.001572	0.001218	0.001540	0.001537	0.001580	0.003657	0.001627	0.001567	0.001518	0.001880	0.003399	0.001164
A1-TS	0.084732	0.121539	0.070884	0.066544	0.114645	0.144566	0.117521	0.088981	0.115422	0.115162	0.115408	0.130403	0.115609	0.117381	0.109886	0.092648	0.111413	0.068101
A2-TS	0.018812	0.021472	0.023219	0.024581	0.025699	0.023846	0.027121	0.020867	0.026594	0.026512	0.026482	0.025050	0.026495	0.027068	0.025621	0.023409	0.022999	0.019259
A3-TS	0.001285	0.001334	0.001209	0.001213	0.001644	0.001549	0.001875	0.001425	0.001846	0.001844	0.001835	0.001691	0.001832	0.001874	0.001762	0.001314	0.001295	0.001129
A4-TS	0.003977	0.004127	0.003741	0.003754	0.005087	0.004794	0.005804	0.004410	0.005712	0.005708	0.005680	0.005232	0.005668	0.005800	0.005451	0.004067	0.004008	0.003495
A5-TS	0.003318	0.003939	0.003206	0.003110	0.004180	0.005280	0.004410	0.010629	0.004332	0.004327	0.004330	0.004728	0.004355	0.004401	0.011313	0.004159	0.004695	0.012139
A6-TS	0.002320	0.004248	0.002068	0.001770	0.002624	0.008062	0.002088	0.001618	0.002047	0.002042	0.002098	0.004788	0.002158	0.002081	0.002016	0.002495	0.004465	0.001562
A7-TS	0.002607	0.004806	0.002313	0.001970	0.002947	0.009162	0.002329	0.001804	0.002282	0.002277	0.002341	0.005418	0.002410	0.002321	0.002250	0.002785	0.005035	0.001725
A8-TS	0.008203	0.013845	0.007508	0.006667	0.009471	0.025007	0.008124	0.009246	0.007971	0.007958	0.008111	0.015716	0.008287	0.008102	0.010721	0.009229	0.014937	0.009847
A10-TS	0.095797	0.033388	0.051208	0.022000	0.085507	0.039089	0.032316	0.025475	0.031767	0.031717	0.036816	0.035461	0.040772	0.032284	0.030655	0.077758	0.030602	0.020065
A11-TS	0.006255	0.006791	0.007170	0.007571	0.007020	0.007001	0.007545	0.005902	0.007469	0.007495	0.007438	0.007266	0.007416	0.007554	0.007166	0.007174	0.007214	0.006308
A12-TS	0.009449	0.017420	0.008383	0.007141	0.010682	0.033212	0.008441	0.006541	0.008273	0.008255	0.008487	0.019640	0.008737	0.008413	0.008155	0.010097	0.018251	0.006253
A13-TS	0.006885	0.007947	0.010584	0.011653	0.009368	0.008297	0.011134	0.008200	0.010863	0.010795	0.010791	0.009498	0.010807	0.011091	0.010430	0.031007	0.033767	0.030308
A1-HTL	0.004320	0.006451	0.003458	0.003174	0.005875	0.007691	0.005904	0.004471	0.005799	0.005786	0.005804	0.006775	0.005819	0.005897	0.005519	0.004713	0.005821	0.003360
A2-HTL	0.000861	0.000978	0.001013	0.001063	0.001211	0.001117	0.001271	0.000978	0.001246	0.001241	0.001241	0.001173	0.001241	0.001268	0.001198	0.001125	0.001103	0.000924
A5-HTL	0.000222	0.000265	0.000214	0.000207	0.000280	0.000359	0.000295	0.000720	0.000290	0.000289	0.000290	0.000319	0.000292	0.000295	0.000766	0.000277	0.000315	0.000821
A6-HTL	0.000046	0.000074	0.000044	0.000040	0.000052	0.000130	0.000046	0.000036	0.000045	0.000045	0.000046	0.000084	0.000047	0.000046	0.000044	0.000054	0.000083	0.000039
A7-HTL	0.000020	0.000036	0.000017	0.000015	0.000022	0.000069	0.000017	0.000014	0.000017	0.000017	0.000018	0.000041	0.000018	0.000017	0.000017	0.000021	0.000038	0.000013
A8-HTL	1.000098	0.000156	0.000095	0.000088	0.000112	0.000267	0.000100	0.000078	0.000099	0.000099	0.000100	0.000175	0.000101	0.000100	0.000096	0.000118	0.000176	0.000087
A10-HTL	0.001907	1.000678	0.001023	0.000446	0.001731	0.000795	0.000660	0.000524	0.000649	0.000648	0.000748	0.000722	0.000826	0.000659	0.000626	0.001570	0.000622	0.000410
A11-HTL	0.000861	0.000935	1.000987	0.001042	0.000966	0.000963	0.001038	0.000812	0.001028	0.001031	0.001024	0.001000	0.001021	0.001040	0.000986	0.000987	0.000993	0.000868
A12-HTL	0.000241	0.000445	0.000214	1.000182	0.000273	0.000847	0.000215	0.000167	0.000211	0.000211	0.000217	0.000501	0.000223	0.000215	0.000208	0.000258	0.000466	0.000160
A1-HTS	0.019020	0.026586	0.015477	0.014449	1.026955	0.031490	0.027221	0.020562	0.026726	0.026660	0.026698	0.029209	0.026726	0.027186	0.025426	0.021637	0.024105	0.015348
A2-HTS	0.015778	0.017987	0.019230	0.020312	0.021706	1.020151	0.022936	0.017637	0.022487	0.022414	0.022392	0.021173	0.022399	0.022890	0.021652	0.019941	0.019627	0.016443
A4-HTS	0.003726	0.003867	0.003505	0.003518	0.004767	0.004493	1.005439	0.004132	0.005352	0.005348	0.005323	0.004903	0.005311	0.005435	0.005108	0.003811	0.003755	0.003275
A5-HTS	0.000846	0.001015	0.000816	0.000790	0.001063	0.001377	0.001117	1.002669	0.001097	0.001096	0.001097	0.001216	0.001104	0.001115	0.002842	0.001057	0.001205	0.003045
A6-HTS	0.001329	0.002431	0.001186	0.001016	0.001504	0.004611	0.001198	0.000928	1.001174	0.001172	0.001204	0.002741	0.001238	0.001194	0.001157	0.001431	0.002557	0.000897
A7-HTS	0.000782	0.001442	0.000694	0.000591	0.000884	0.002749	0.000699	0.000541	0.000685	1.000683	0.000702	0.001625	0.000723	0.000696	0.000675	0.000836	0.001510	0.000517
A8-HTS	0.005405	0.009325	0.004910	0.004318	0.006209	0.017085	0.005226	0.005525	0.005127	0.005118	1.005226	0.010567	0.005349	0.005211	0.006485	0.006007	0.009986	0.005786
A10-HTS	0.049097	0.017056	0.026228	0.011243	0.043682	0.019966	0.016501	0.012986	0.016220	0.016194	0.018811	1.018110	0.020841	0.016484	0.015652	0.039743	0.015643	0.010245
A11-HTS	0.002066	0.002243	0.002368	0.002500	0.002319	0.002312	0.002492	0.001949	0.002467	0.002475	0.002457	0.002400	1.002449	0.002495	0.002367	0.002369	0.002383	0.002083
A12-HTS	0.008276	0.015258	0.007342	0.006255	0.009356	0.029089	0.007393	0.005729	0.007246	0.007230	0.007434	0.017202	0.007653	1.007368	0.007143	0.008844	0.015986	0.005477

	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
A13-HTS	0.002353	0.002716	0.003617	0.003982	0.003201	0.002835	0.003805	0.002802	0.003712	0.003689	0.003687	0.003246	0.003693	0.003790	1.003564	0.010596	0.011539	0.010357
A1-LL	0.000587	0.000799	0.000477	0.000447	0.000829	0.000938	0.000851	0.000643	0.000836	0.000834	0.000835	0.000890	0.000835	0.000850	0.000795	1.000661	0.000721	0.000478
A2-LL	0.000265	0.000301	0.000310	0.000325	0.000379	0.000344	0.000389	0.000301	0.000382	0.000380	0.000380	0.000360	0.000380	0.000388	0.000367	0.000348	1.000336	0.000280
A5-LL	0.000070	0.000080	0.000067	0.000066	0.000089	0.000104	0.000094	0.000237	0.000093	0.000093	0.000093	0.000097	0.000093	0.000094	0.000252	0.000088	0.000097	1.000271
A6-LL	0.000026	0.000038	0.000026	0.000025	0.000030	0.000061	0.000028	0.000022	0.000028	0.000028	0.000028	0.000043	0.000029	0.000028	0.000027	0.000033	0.000045	0.000026
A7-LL	0.000013	0.000024	0.000012	0.000010	0.000015	0.000046	0.000012	0.000009	0.000011	0.000011	0.000012	0.000027	0.000012	0.000012	0.000011	0.000014	0.000025	0.000009
A8-LL	0.000065	0.000096	0.000066	0.000063	0.000075	0.000152	0.000071	0.000055	0.000070	0.000070	0.000071	0.000107	0.000071	0.000071	0.000068	0.000083	0.000113	0.000065
A10-LL	0.000625	0.000234	0.000340	0.000154	0.000588	0.000275	0.000232	0.000187	0.000228	0.000228	0.000260	0.000252	0.000285	0.000232	0.000220	0.000530	0.000216	0.000144
A11-LL	0.000344	0.000374	0.000395	0.000417	0.000386	0.000385	0.000415	0.000325	0.000411	0.000413	0.000409	0.000400	0.000408	0.000416	0.000394	0.000395	0.000397	0.000347
A12-LL	0.000065	0.000120	0.000058	0.000049	0.000074	0.000229	0.000058	0.000045	0.000057	0.000057	0.000059	0.000135	0.000060	0.000058	0.000056	0.000070	0.000126	0.000043
A1-LS	0.004719	0.006380	0.003891	0.003667	0.006972	0.007567	0.006939	0.005230	0.006810	0.006791	0.006796	0.007208	0.006800	0.006929	0.006477	0.005638	0.005829	0.003890
A2-LS	0.003097	0.003546	0.003799	0.004016	0.004373	0.003937	0.004447	0.003453	0.004362	0.004349	0.004344	0.004122	0.004346	0.004439	0.004203	0.003946	0.003764	0.003139
A5-LS	0.000362	0.000426	0.000349	0.000338	0.000458	0.000568	0.000484	0.001195	0.000476	0.000475	0.000475	0.000514	0.000478	0.000483	0.001269	0.000453	0.000508	0.001363
A6-LS	0.000528	0.000968	0.000470	0.000402	0.000597	0.001840	0.000474	0.000367	0.000465	0.000464	0.000477	0.001091	0.000490	0.000473	0.000458	0.000567	0.001017	0.000354
A7-LS	0.000391	0.000721	0.000347	0.000295	0.000442	0.001374	0.000349	0.000271	0.000342	0.000342	0.000351	0.000813	0.000362	0.000348	0.000337	0.000418	0.000755	0.000259
A8-LS	0.002364	0.004295	0.002107	0.001808	0.002683	0.008121	0.002151	0.001831	0.002109	0.002105	0.002160	0.004848	0.002221	0.002144	0.002238	0.002547	0.004519	0.001802
A10-LS	0.008992	0.003174	0.004818	0.002087	0.008133	0.003716	0.003075	0.002441	0.003023	0.003019	0.003495	0.003373	0.003864	0.003072	0.002917	0.007381	0.002909	0.001910
A11-LS	0.004820	0.005233	0.005526	0.005834	0.005410	0.005396	0.005814	0.004548	0.005756	0.005776	0.005732	0.005600	0.005715	0.005822	0.005522	0.005528	0.005560	0.004861
A12-LS	0.000932	0.001718	0.000827	0.000704	0.001053	0.003275	0.000832	0.000645	0.000816	0.000814	0.000837	0.001937	0.000862	0.000830	0.000804	0.000996	0.001800	0.000617
A1-OL	0.011567	0.017361	0.009139	0.008336	0.015843	0.020676	0.015775	0.011950	0.015495	0.015461	0.015511	0.018174	0.015552	0.015757	0.014748	0.012616	0.015535	0.008888
A2-OL	0.002089	0.002375	0.002389	0.002493	0.003058	0.002757	0.003125	0.002421	0.003063	0.003051	0.003050	0.002890	0.003049	0.003119	0.002943	0.002871	0.002763	0.002309
A3-OL	0.001488	0.001544	0.001400	0.001405	0.001903	0.001794	0.002172	0.001650	0.002137	0.002135	0.002125	0.001957	0.002121	0.002170	0.002040	0.001522	0.001499	0.001307
A5-OL	0.000362	0.000426	0.000349	0.000338	0.000458	0.000568	0.000484	0.001195	0.000476	0.000475	0.000475	0.000514	0.000478	0.000483	0.001269	0.000453	0.000508	0.001363
A6-OL	0.000091	0.000163	0.000083	0.000072	0.000103	0.000305	0.000084	0.000065	0.000082	0.000082	0.000084	0.000184	0.000087	0.000084	0.000081	0.000100	0.000174	0.000065
A7-OL	0.000098	0.000180	0.000087	0.000074	0.000111	0.000344	0.000087	0.000068	0.000086	0.000085	0.000088	0.000203	0.000090	0.000087	0.000084	0.000104	0.000189	0.000065
A8-OL	0.000349	0.000427	0.000329	0.000314	0.000441	0.000599	0.000459	0.001176	0.000451	0.000450	0.000451	0.000515	0.000455	0.000458	0.001246	0.000425	0.000496	0.001332
A9-OL	0.053746	0.065688	0.041550	0.039098	0.071133	0.072456	0.080341	0.060884	0.079033	0.078944	0.078668	0.076061	0.078501	0.080286	0.075086	0.053724	0.056555	0.044657
A10-OL	0.028232	0.009523	0.015001	0.006307	0.024371	0.011144	0.009184	0.007111	0.009026	0.009011	0.010533	0.010094	0.011713	0.010094	0.008711	0.022278	0.008724	0.005702
A11-OL	0.000746	0.000810	0.000855	0.000903	0.000837	0.000835	0.000900	0.000704	0.000891	0.000894	0.000887	0.000867	0.000884	0.000901	0.000855	0.000856	0.000860	0.000752
A12-OL	0.000619	0.001141	0.000549	0.000468	0.000700	0.002176	0.000553	0.000429	0.000542	0.000541	0.000556	0.001287	0.000572	0.000551	0.000534	0.000662	0.001196	0.000410
A1-OS	0.009447	0.013076	0.007970	0.007546	0.012987	0.015481	0.013399	0.010134	0.013158	0.013128	0.013144	0.014357	0.013156	0.013383	0.012524	0.010486	0.012015	0.007734
A2-OS	0.006089	0.006938	0.007207	0.007569	0.008672	0.007898	0.008961	0.006925	0.008784	0.008753	0.008747	0.008284	0.008747	0.008943	0.008450	0.008032	0.007779	0.006505
A5-OS	0.001842	0.002192	0.001773	0.001715	0.002325	0.002953	0.002449	0.005996	0.002406	0.002403	0.002405	0.002635	0.002420	0.002445	0.006375	0.002299	0.002603	0.006838
A6-OS	0.000147	0.000258	0.000134	0.000118	0.000166	0.000477	0.000137	0.000107	0.000135	0.000135	0.000138	0.000291	0.000141	0.000137	0.000132	0.000163	0.000277	0.000108
A7-OS	0.000195	0.000360	0.000173	0.000148	0.000221	0.000687	0.000175	0.000135	0.000171	0.000171	0.000176	0.000406	0.000181	0.000174	0.000169	0.000209	0.000378	0.000129
A8-OS	0.001078	0.001862	0.000977	0.000857	0.001240	0.003415	0.001043	0.001136	0.001023	0.001021	0.001043	0.002111	0.001067	0.001040	0.001327	0.001194	0.001990	0.001189
A10-OS	0.016386	0.005789	0.008778	0.003801	0.014882	0.006776	0.005597	0.004456	0.005502	0.005494	0.006362	0.007036	0.005592	0.005310	0.013500	0.005303	0.003476	
A11-OS	0.002284	0.002480	0.002618	0.002764	0.002563	0.002556	0.002755	0.002155	0.002727	0.002737	0.002716	0.002653	0.002708	0.002758	0.002616	0.002619	0.002634	0.002303
A12-OS	0.002672	0.004926	0.002370	0.002019	0.003020	0.009391	0.002387	0.001849	0.002339	0.002334	0.002400	0.005553	0.002471	0.002379	0.002306	0.002855	0.005161	0.001768
A14	0.084238	0.099566	0.065258	0.061238	0.119705	0.117433	0.138291	0.103482	0.135544	0.135044	0.134861	0.126971	0.134638	0.138038	0.128773	0.083052	0.084809	0.068665
A15	0.320574	0.372668	0.424635	0.412692	0.364007	0.405017	0.382465	0.293936	0.373763	0.374120	0.373578	0.384169	0.387670	0.378920	0.401059	0.397993	0.443200	0.340873
C-1	0.243939	0.297318	0.188922	0.177647	0.336850	0.332825	0.370939	0.280367	0.364615	0.364005	0.362932	0.350179	0.362223	0.370596	0.346413	0.255229	0.256178	0.201860
C-2	0.092338	0.235181	0.070654	0.054604	0.100958	0.303086	0.069468	0.054075	0.068144	0.067942	0.071042	0.187290	0.073466	0.069349	0.065600	0.092807	0.218416	0.048568

	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
C-3	0.241902	0.239902	0.183147	0.174013	0.310925	0.291836	0.357493	0.272806	0.352557	0.352783	0.350283	0.321174	0.348852	0.357532	0.335042	0.234948	0.226452	0.202110
C-4	0.025304	0.079533	0.022893	0.020590	0.030795	0.056228	0.025886	0.020063	0.025386	0.025306	0.025827	0.041241	0.026241	0.025840	0.024413	0.028338	0.038284	0.018391
C-5	0.037075	0.043567	0.028405	0.026669	0.057500	0.051707	0.061473	0.045927	0.060260	0.060042	0.059930	0.056027	0.059801	0.061365	0.057145	0.046344	0.040232	0.032501
C-6	0.006814	0.007723	0.008503	0.009091	0.008473	0.008356	0.009515	0.007251	0.009347	0.009328	0.009306	0.008801	0.009291	0.009505	0.008952	0.008453	0.008711	0.007429
C-7	0.031741	0.041031	0.024735	0.022673	0.053627	0.052298	0.063857	0.046125	0.062056	0.061447	0.061802	0.059402	0.061834	0.063575	0.058564	0.035073	0.047963	0.028066
C-8	0.032834	0.039791	0.025638	0.024047	0.061509	0.046982	0.052937	0.039659	0.051896	0.051712	0.051661	0.049625	0.051593	0.052844	0.049314	0.048098	0.034233	0.026709
C-9	0.000938	0.001036	0.001037	0.001076	0.001142	0.001136	0.001215	0.000941	0.001197	0.001197	0.001194	0.001162	0.001193	0.001215	0.001152	0.000761	0.000745	0.000604
C-10	0.035848	0.036837	0.027875	0.026300	0.057043	0.051667	0.068830	0.050669	0.067163	0.066703	0.066719	0.058905	0.066592	0.068608	0.063794	0.034472	0.033976	0.028858
C-11	0.002805	0.007721	0.002165	0.001701	0.003099	0.005069	0.002211	0.001718	0.002170	0.002164	0.002252	0.004532	0.002322	0.002208	0.002087	0.002829	0.001939	0.001528
C-12	0.133099	0.143375	0.138247	0.142756	0.178485	0.167036	0.202651	0.153103	0.198977	0.198485	0.197830	0.181999	0.197290	0.202398	0.189604	0.150483	0.147504	0.127479
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.128536	0.144447	0.145759	0.151948	0.173791	0.170370	0.196749	0.148681	0.192686	0.191878	0.191851	0.180125	0.191732	0.196329	0.184960	0.169298	0.176084	0.148730
C-15	0.040177	0.046379	0.056824	0.061583	0.048292	0.047107	0.053893	0.041011	0.052907	0.052808	0.052678	0.049693	0.052788	0.053786	0.051236	0.041297	0.042225	0.035483
C-16	0.004047	0.004246	0.003315	0.003149	0.005482	0.005331	0.006011	0.004585	0.005905	0.005892	0.005885	0.005587	0.005880	0.006004	0.005661	0.004370	0.004391	0.003656
C-17	0.012374	0.016690	0.009781	0.009065	0.049176	0.019390	0.015775	0.018806	0.015566	0.015583	0.015563	0.017553	0.015576	0.015779	0.015046	0.039747	0.014984	0.009888
C-18	0.026402	0.027400	0.024837	0.024927	0.033777	0.031832	0.038536	0.029277	0.037922	0.037895	0.037712	0.034737	0.037633	0.038508	0.036195	0.027000	0.026608	0.023202
C-19	0.114701	0.211469	0.101763	0.086689	0.129671	0.403166	0.102467	0.079398	0.100428	0.100209	0.103028	0.238411	0.106064	0.102125	0.098994	0.122576	0.221560	0.075904
C-20	0.033057	0.036088	0.037209	0.039115	0.038775	0.038344	0.042609	0.033027	0.042068	0.042128	0.041876	0.040072	0.041758	0.042628	0.040324	0.048900	0.050538	0.044339
C-21	0.020480	0.022118	0.019158	0.018472	0.026875	0.027063	0.029303	0.089565	0.028758	0.028706	0.028675	0.027704	0.028819	0.029233	0.093850	0.025086	0.026111	0.101616
C-22	0.439192	0.147057	0.233065	0.097526	0.376173	0.172083	0.141742	0.109271	0.139309	0.139076	0.162810	0.155834	0.181212	0.141594	0.134440	0.344292	0.134715	0.088000
C-23	0.216291	0.240715	0.266486	0.285001	0.251937	0.247484	0.275354	0.212892	0.271647	0.271889	0.270498	0.258669	0.269846	0.275413	0.260383	0.297192	0.306041	0.266765
C-24	0.047665	0.055835	0.067344	0.073599	0.051890	0.053484	0.054329	0.042714	0.053699	0.053820	0.053562	0.053425	0.053491	0.054372	0.051894	0.037997	0.037843	0.030848
C-25	0.072695	0.078925	0.083336	0.087985	0.081591	0.081370	0.087684	0.068595	0.086809	0.087104	0.086443	0.084450	0.086188	0.087797	0.083279	0.083371	0.083845	0.073316
C-26	0.013100	0.015122	0.020140	0.022173	0.017827	0.015789	0.012187	0.015604	0.020671	0.020541	0.020533	0.018073	0.020564	0.021104	0.019847	0.059002	0.064254	0.057672
C-27	0.056618	0.076118	0.090805	0.054093	0.060181	0.104050	0.052782	0.038330	0.048416	0.048411	0.049518	0.072075	0.064333	0.049135	0.088782	0.062804	0.099315	0.043260
Ld-BL	0.042070	0.059935	0.034888	0.032638	0.057239	0.071302	0.058469	0.045218	0.057423	0.057294	0.057415	0.064563	0.057517	0.058398	0.055611	0.046261	0.054889	0.034924
Ld-BS	0.073420	0.103698	0.061529	0.057871	0.099994	0.123404	0.102619	0.080172	0.100777	0.100546	0.100734	0.112395	0.100893	0.102493	0.098416	0.081122	0.095502	0.062603
Ld-CL	0.011889	0.017593	0.009519	0.008734	0.016097	0.020997	0.016202	0.012991	0.015916	0.015882	0.015929	0.018531	0.015971	0.016183	0.015854	0.012919	0.015915	0.010130
Ld-CS	0.025179	0.036103	0.020879	0.019520	0.034262	0.043009	0.034941	0.027410	0.034315	0.034238	0.034313	0.038782	0.034377	0.034898	0.033614	0.027732	0.033094	0.021373
Ld-TL	0.014475	0.021298	0.011741	0.010846	0.019539	0.025371	0.019809	0.015373	0.019457	0.019416	0.019470	0.022503	0.019516	0.019786	0.018883	0.015718	0.019328	0.011817
Ld-TS	0.039167	0.055877	0.032827	0.030814	0.052885	0.066553	0.054178	0.042218	0.053210	0.053091	0.053209	0.060054	0.053309	0.054112	0.051838	0.042882	0.051411	0.032979
Ld-HTL	0.002054	0.003056	0.001651	0.001517	0.002790	0.003649	0.002806	0.002198	0.002756	0.002750	0.002759	0.003216	0.002766	0.002803	0.002695	0.002247	0.002770	0.001694
Ld-HTS	0.007889	0.010976	0.006434	0.006006	0.417864	0.013612	0.011251	0.150694	0.011047	0.011020	0.011036	0.012552	0.011050	0.011237	0.010765	0.008981	0.009994	0.006689
Ld-LL	0.000286	0.000387	0.000234	0.000220	0.000403	0.000457	0.000414	0.000338	0.000407	0.000406	0.000406	0.000433	0.000403	0.000414	0.000412	0.469789	0.000353	0.154112
Ld-LS	0.001555	0.002080	0.001288	0.001213	0.002279	0.002476	0.002266	0.001832	0.002224	0.002218	0.002220	0.002355	0.002222	0.002263	0.002237	0.001857	0.001919	0.001434
Ld-OL	0.005611	0.008336	0.004467	0.004087	0.007670	0.009933	0.007651	0.005921	0.007515	0.007499	0.007523	0.008764	0.007542	0.007642	0.007276	0.006131	0.007498	0.004489
Ld-OS	0.004660	0.006375	0.003975	0.003772	0.006373	0.007598	0.006576	0.005584	0.006458	0.006443	0.006451	0.007038	0.006460	0.006568	0.006748	0.005216	0.005955	0.004603
Ld-LSD	0.003461	0.004929	0.002875	0.002695	0.032072	0.005856	0.004843	0.003665	0.004756	0.004745	0.004755	0.005323	0.004762	0.004837	0.004527	0.003826	0.004507	0.002786
Lb-BL	0.017961	0.021101	0.016062	0.014187	0.020654	0.031760	0.016993	0.013554	0.016686	0.016654	0.017036	0.023546	0.017383	0.016963	0.016553	0.019088	0.021833	0.012682
Lb-BS	0.096790	0.108236	0.081208	0.068153	0.108776	0.167417	0.084333	0.069510	0.082788	0.082626	0.085097	0.121353	0.087305	0.084169	0.084354	0.102012	0.113845	0.066547
Lb-CL	0.007485	0.008797	0.007013	0.006357	0.008407	0.013094	0.006971	0.005761	0.006854	0.006849	0.006991	0.009694	0.007129	0.006961	0.006989	0.007954	0.009156	0.005670
Lb-CS	0.041825	0.045460	0.034592	0.028714	0.046243	0.068708	0.035428	0.028368	0.034792	0.034733	0.035832	0.050321	0.036806	0.035364	0.034657	0.042493	0.046384	0.026102
Lb-TL	0.010556	0.011735	0.008821	0.007583	0.012001	0.016185	0.010068	0.008125	0.009896	0.009883	0.010097	0.012818	0.010290	0.010054	0.009915	0.010742	0.011595	0.007247



	A8-HTL	A10-HTL	A11-HTL	A12-HTL	A1-HTS	A2-HTS	A4-HTS	A5-HTS	A6-HTS	A7-HTS	A8-HTS	A10-HTS	A11-HTS	A12-HTS	A13-HTS	A1-LL	A2-LL	A5-LL
	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Lb-TS	0.089592	0.085689	0.070091	0.055731	0.096124	0.123121	0.071274	0.057847	0.070028	0.069927	0.072498	0.094460	0.074718	0.071161	0.070515	0.091408	0.090359	0.056276
Lb-HTL	0.134705	0.172345	0.335988	1.002945	0.001200	0.001749	0.000981	0.000775	0.000966	0.000965	0.000987	0.001325	0.001008	0.000980	0.000947	0.001138	0.001245	0.000750
Lb-HTS	0.054101	0.050108	0.042269	0.033150	0.256926	0.344552	0.481505	0.194811	0.982668	0.958048	0.548972	0.598515	0.322308	1.026464	0.331670	0.054780	0.053240	0.031787
Lb-LL	0.000353	0.000334	0.000326	0.000295	0.000396	0.000422	0.000324	0.000265	0.000319	0.000319	0.000326	0.000366	0.000332	0.000324	0.000320	0.041672	0.128825	0.080337
Lb-LS	0.014348	0.015348	0.012936	0.011546	0.015856	0.021553	0.012983	0.010404	0.012783	0.012784	0.013055	0.016792	0.013314	0.012971	0.012675	0.014892	0.015651	0.009993
Lb-OL	0.002542	0.002609	0.002820	0.002793	0.002899	0.003057	0.002636	0.002055	0.002593	0.002590	0.002621	0.002791	0.002651	0.002634	0.002522	0.002751	0.002699	0.002056
Lb-OS	0.009820	0.011426	0.008348	0.007110	0.011001	0.017603	0.008741	0.007408	0.008588	0.008577	0.008805	0.012706	0.009017	0.008726	0.008957	0.010161	0.011724	0.006995
Lb-HRD	0.601441	0.455569	0.129443	0.081999	0.173803	0.170400	0.123547	0.198324	0.170312	0.204405	0.159619	0.195639	0.141231	0.139047	0.145228	0.286186	0.161821	0.320471
K-BL	0.037865	0.033986	0.030317	0.025756	0.044156	0.040265	0.037596	0.031342	0.036945	0.036880	0.037633	0.038505	0.038249	0.037554	0.037800	0.038901	0.033755	0.027504
K-BS	0.047240	0.055132	0.048114	0.047642	0.063477	0.068038	0.062893	0.054839	0.061691	0.061508	0.061763	0.064286	0.062011	0.062781	0.065604	0.059477	0.061177	0.053522
K-CL	0.012107	0.014600	0.011515	0.011287	0.015036	0.017262	0.015394	0.013754	0.015159	0.015155	0.015164	0.016173	0.015198	0.015387	0.016404	0.013483	0.014586	0.012921
K-CS	0.011743	0.014002	0.010486	0.009680	0.014693	0.018144	0.013775	0.013093	0.013527	0.013499	0.013633	0.015673	0.013758	0.013755	0.015477	0.013153	0.014266	0.012340
K-TL	0.006969	0.007219	0.005947	0.005397	0.008245	0.008731	0.007793	0.006830	0.007668	0.007663	0.007738	0.008165	0.007809	0.007787	0.008186	0.007194	0.007087	0.006129
K-TS	0.029465	0.026851	0.023478	0.019453	0.032965	0.034295	0.026952	0.023985	0.026475	0.026427	0.027126	0.030094	0.027715	0.026913	0.028720	0.034018	0.031946	0.026484
K-HTL	0.001221	0.095451	0.474521	0.001154	0.001486	0.001523	0.001445	0.001296	0.001422	0.001422	0.001428	0.001472	0.001436	0.001444	0.001542	0.001379	0.001374	0.001261
K-HTS	0.013440	0.013030	0.012207	0.010982	0.033547	0.100691	0.570532	0.346949	0.015575	0.013099	0.439234	0.104497	0.666359	0.013341	0.597014	0.018377	0.018514	0.015278
K-LL	0.000428	0.000435	0.000432	0.000422	0.000513	0.000510	0.000486	0.000428	0.000478	0.000478	0.000481	0.000491	0.000484	0.000485	0.000510	0.027213	0.469222	0.308127
K-LS	0.003625	0.003974	0.003535	0.003344	0.004093	0.005378	0.003653	0.003145	0.003600	0.003601	0.003644	0.004406	0.003690	0.003651	0.003768	0.003945	0.004185	0.003180
K-OL	0.017549	0.009977	0.011169	0.007110	0.017116	0.011555	0.010501	0.008650	0.010326	0.010312	0.011005	0.010944	0.011549	0.010491	0.010481	0.015326	0.009474	0.007407
K-OS	0.007130	0.006291	0.006305	0.005612	0.008107	0.007643	0.006786	0.006787	0.006675	0.006669	0.006804	0.007101	0.006923	0.006780	0.007917	0.007640	0.006689	0.006838
B-L	0.104789	0.123633	0.093875	0.086896	0.130088	0.150512	0.120438	0.095878	0.118335	0.118117	0.119348	0.133821	0.120407	0.120296	0.116994	0.112453	0.119027	0.082357
B-S	0.302343	0.339023	0.235577	0.217305	0.307922	0.392700	0.277969	0.238557	0.278716	0.282176	0.279780	0.334615	0.280229	0.279398	0.278469	0.289681	0.303396	0.231827
C-L	0.036034	0.047108	0.034990	0.034017	0.060000	0.057216	0.043877	0.036597	0.043156	0.043110	0.043306	0.049943	0.043523	0.043838	0.044265	0.039184	0.044959	0.032611
C-S	0.144756	0.150397	0.097552	0.088114	0.119995	0.153714	0.103039	0.093518	0.105948	0.109079	0.106064	0.130769	0.105465	0.104408	0.104466	0.116755	0.115265	0.095366
T-L	0.034186	0.043140	0.031377	0.029471	0.041775	0.052357	0.039686	0.031919	0.039012	0.038955	0.039294	0.045509	0.039606	0.039644	0.038918	0.035539	0.039947	0.026778
T-S	0.329383	0.303554	0.183055	0.153507	0.237743	0.278259	0.193555	0.183716	0.203366	0.212296	0.203609	0.245361	0.201575	0.197518	0.197770	0.251883	0.223920	0.207272
HT-L	0.139118	0.272283	0.814328	1.008090	0.006612	0.008080	0.006420	0.005199	0.006317	0.006311	0.006344	0.007173	0.006378	0.006415	0.006317	0.006066	0.006741	0.004851
HT-S	0.156300	0.138246	0.088813	0.073974	0.734457	0.484762	1.083016	0.720795	1.034883	1.012081	1.023486	0.744496	1.021639	1.072733	0.961768	0.121725	0.105663	0.097019
Lo-L	0.001359	0.001557	0.001713	0.001781	0.001559	0.001650	0.001467	0.001225	0.001443	0.001443	0.001452	0.001539	0.001462	0.001466	0.001476	0.538864	0.598593	0.542725
Lo-S	0.086825	0.074137	0.038669	0.033121	0.043332	0.050286	0.034588	0.038567	0.039269	0.042919	0.038439	0.047020	0.036781	0.036232	0.036599	0.053220	0.040988	0.050398
O-L	0.028090	0.023987	0.022106	0.018020	0.035354	0.027449	0.023587	0.018790	0.023191	0.023159	0.023900	0.025326	0.024493	0.023565	0.022929	0.027106	0.022783	0.016422
O-S	0.071394	0.065622	0.043268	0.040269	0.043566	0.050971	0.036529	0.038457	0.039452	0.041888	0.039022	0.046576	0.038042	0.037620	0.039405	0.048275	0.040741	0.045286
COM	0.046416	0.054023	0.067228	0.073867	0.056008	0.052926	0.059229	0.045436	0.058281	0.058228	0.058052	0.055347	0.057956	0.059194	0.055882	0.054195	0.055601	0.047512
FA1	0.095531	0.131481	0.238678	0.279603	0.080145	0.084954	0.078580	0.062526	0.077617	0.077758	0.077711	0.080971	0.077861	0.078621	0.075815	0.060155	0.060830	0.046961
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.042900	0.059044	0.107183	0.125561	0.035991	0.038150	0.035288	0.028078	0.034855	0.034919	0.034898	0.036362	0.034965	0.035307	0.034046	0.027014	0.027317	0.021089
FA4	0.104876	0.133737	0.209799	0.241207	0.095614	0.100259	0.097324	0.077650	0.096516	0.096960	0.096309	0.098184	0.096153	0.097501	0.093571	0.095033	0.097214	0.081737
FA5	0.023883	0.028322	0.036999	0.041126	0.026064	0.026137	0.028065	0.021815	0.027687	0.027712	0.027586	0.026810	0.027533	0.028071	0.026646	0.034651	0.036233	0.031438
FA6	0.019578	0.021942	0.020579	0.021091	0.021035	0.023203	0.020994	0.016975	0.020868	0.020999	0.020853	0.021992	0.020835	0.021047	0.020322	0.019659	0.020060	0.016390
FA7	0.042900	0.059044	0.107183	0.125561	0.035991	0.038150	0.035288	0.028078	0.034855	0.034919	0.034898	0.036362	0.034965	0.035307	0.034046	0.027014	0.027317	0.021089
FA8	0.139628	0.146501	0.114363	0.108647	0.189145	0.183922	0.207387	0.158212	0.203722	0.203291	0.203046	0.192782	0.202879	0.207154	0.195324	0.150775	0.151508	0.126125
FA9	0.004472	0.005205	0.006477	0.007117	0.005396	0.005099	0.005706	0.004377	0.005615	0.005610	0.005593	0.005332	0.005584	0.005703	0.005384	0.005221	0.005357	0.004577

	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
A1-BL	0.083457	0.087138	0.089599	0.119170	0.081489	0.087771	0.117990	0.130434	0.092293	0.117326	0.118793	0.116681	0.137513	0.105009	0.118793	0.080073	0.149299	0.084072
A2-BL	0.028829	0.027222	0.027384	0.026283	0.027051	0.026258	0.023585	0.022302	0.017591	0.021440	0.021708	0.021446	0.023663	0.019252	0.021708	0.023956	0.024680	0.022349
A3-BL	0.007252	0.007608	0.007561	0.007291	0.007132	0.007678	0.007569	0.007067	0.006442	0.008023	0.008124	0.007964	0.007887	0.007201	0.008124	0.006198	0.006690	0.005437
A5-BL	0.003472	0.003301	0.003365	0.003558	0.003336	0.003194	0.002991	0.003719	0.008016	0.002941	0.002977	0.002946	0.003619	0.002663	0.002977	0.003740	0.003993	0.003780
A6-BL	0.000532	0.000510	0.000584	0.001153	0.000524	0.000495	0.000665	0.001843	0.000377	0.000466	0.000472	0.000493	0.001449	0.000426	0.000472	0.000586	0.001462	0.000467
A7-BL	0.000511	0.000491	0.000565	0.001136	0.000504	0.000477	0.000651	0.001830	0.000366	0.000452	0.000457	0.000479	0.001435	0.000413	0.000457	0.000574	0.001449	0.000456
A8-BL	0.001780	0.001694	0.001846	0.002943	0.001728	0.001640	0.001895	0.004252	0.002292	0.001515	0.001533	0.001566	0.003498	0.001378	0.001533	0.001881	0.003584	0.001658
A9-BL	0.083103	0.089368	0.089349	0.095446	0.082167	0.091065	0.116254	0.108184	0.105333	0.134908	0.136594	0.132749	0.125391	0.120697	0.136594	0.069249	0.126261	0.095845
A10-BL	0.012495	0.012911	0.025150	0.016796	0.012172	0.012950	0.048499	0.018173	0.012917	0.016110	0.016312	0.020942	0.018998	0.014432	0.016312	0.032847	0.020749	0.014294
A11-BL	0.003776	0.003710	0.003694	0.003447	0.003587	0.003642	0.003864	0.003610	0.003501	0.004445	0.004501	0.004374	0.004099	0.003978	0.004501	0.003787	0.003569	0.003751
A12-BL	0.005621	0.005396	0.006217	0.012494	0.005545	0.005244	0.007164	0.020135	0.004021	0.004967	0.005030	0.005268	0.015785	0.004540	0.005030	0.006312	0.015937	0.005016
A1-BS	0.136649	0.142373	0.146134	0.191398	0.133292	0.143285	0.191116	0.209058	0.150347	0.191126	0.193515	0.189965	0.221270	0.171058	0.193515	0.130292	0.237499	0.136067
A2-BS	0.099760	0.094084	0.094626	0.090439	0.093572	0.090704	0.079435	0.076471	0.060484	0.073704	0.074625	0.073726	0.081164	0.066189	0.074625	0.081720	0.084570	0.076836
A3-BS	0.000760	0.000797	0.000792	0.000764	0.000747	0.000804	0.000793	0.000740	0.000675	0.000841	0.000851	0.000834	0.000826	0.000754	0.000851	0.000649	0.000701	0.000570
A5-BS	0.008649	0.008223	0.008381	0.008864	0.008311	0.007957	0.007450	0.009269	0.019940	0.007323	0.007415	0.007337	0.009019	0.006633	0.007415	0.009311	0.009948	0.009409
A6-BS	0.001597	0.001530	0.001753	0.003459	0.001571	0.001485	0.001994	0.005530	0.001131	0.001398	0.001415	0.001479	0.004348	0.001277	0.001415	0.001758	0.004385	0.001401
A7-BS	0.001789	0.001717	0.001978	0.003975	0.001764	0.001669	0.002279	0.006407	0.001279	0.001581	0.001600	0.001676	0.005023	0.001445	0.001600	0.002008	0.005071	0.001596
A8-BS	0.006111	0.005833	0.006443	0.010927	0.005960	0.005654	0.006830	0.016324	0.007311	0.005270	0.005336	0.005482	0.013234	0.004800	0.005336	0.006618	0.013523	0.005716
A10-BS	0.021759	0.022506	0.042984	0.029207	0.021204	0.022583	0.083115	0.031563	0.022478	0.028026	0.028377	0.036101	0.033015	0.025107	0.028377	0.056573	0.036092	0.025187
A11-BS	0.007621	0.007487	0.007455	0.006957	0.007240	0.007351	0.007799	0.007286	0.007065	0.008972	0.009084	0.008828	0.008273	0.008028	0.009084	0.007642	0.007203	0.007570
A12-BS	0.020135	0.019328	0.022267	0.044753	0.019861	0.018785	0.025659	0.072120	0.014401	0.017793	0.018015	0.018869	0.056540	0.016262	0.018015	0.022609	0.057083	0.017966
A13-BS	0.011854	0.008836	0.008828	0.006483	0.010147	0.007473	0.002462	0.002226	0.002266	0.002899	0.002935	0.002846	0.002526	0.002615	0.002935	0.002065	0.002001	0.002007
A1-CL	0.021916	0.023075	0.023891	0.033646	0.021485	0.023321	0.032182	0.037103	0.024754	0.031472	0.031866	0.031366	0.038584	0.028170	0.031866	0.021506	0.043595	0.023092
A2-CL	0.008310	0.007818	0.007867	0.007547	0.007776	0.007529	0.006724	0.006326	0.004941	0.006009	0.006084	0.006016	0.006702	0.005393	0.006084	0.006792	0.007024	0.006294
A3-CL	0.002694	0.002826	0.002808	0.002708	0.002649	0.002852	0.002812	0.002625	0.002393	0.002980	0.003017	0.002958	0.002929	0.002675	0.003017	0.002302	0.002485	0.002020
A5-CL	0.002645	0.002515	0.002567	0.002740	0.002543	0.002434	0.002290	0.002895	0.006080	0.002242	0.002270	0.002248	0.002801	0.002031	0.002270	0.002853	0.003085	0.002879
A6-CL	0.000118	0.000113	0.000128	0.000247	0.000116	0.000109	0.000144	0.000391	0.000083	0.000102	0.000103	0.000108	0.000309	0.000093	0.000103	0.000127	0.000311	0.000101
A7-CL	0.000409	0.000392	0.000452	0.000909	0.000403	0.000381	0.000521	0.001464	0.000292	0.000361	0.000366	0.000383	0.001148	0.000330	0.000366	0.000459	0.001159	0.000365
A8-CL	0.001077	0.001024	0.001115	0.001771	0.001044	0.000990	0.001140	0.002553	0.001347	0.000912	0.000923	0.000943	0.002101	0.000829	0.000923	0.001125	0.002149	0.000990
A9-CL	0.041229	0.044318	0.044315	0.047444	0.040757	0.045152	0.057779	0.053698	0.052380	0.067104	0.067942	0.066025	0.062275	0.060035	0.067942	0.034338	0.062568	0.048037
A10-CL	0.002863	0.002962	0.005661	0.003848	0.002790	0.002972	0.010968	0.004160	0.002960	0.003691	0.003737	0.004756	0.004351	0.003307	0.003737	0.007452	0.004753	0.003307
A11-CL	0.006317	0.006205	0.006179	0.005766	0.006001	0.006093	0.006464	0.006039	0.005856	0.007436	0.007529	0.007317	0.006857	0.006654	0.007529	0.006334	0.005970	0.006274
A12-CL	0.002177	0.002090	0.002408	0.004839	0.002147	0.002031	0.002774	0.007798	0.001557	0.001924	0.001948	0.002040	0.006113	0.001758	0.001948	0.002445	0.006172	0.001943
A1-CS	0.050783	0.053019	0.054547	0.072857	0.049585	0.053402	0.071883	0.079745	0.056134	0.071355	0.072247	0.070976	0.083964	0.063865	0.072247	0.048824	0.091351	0.051186
A2-CS	0.024334	0.023055	0.023183	0.022198	0.022895	0.022273	0.019756	0.019033	0.015198	0.018561	0.018793	0.018552	0.020236	0.016676	0.018793	0.020492	0.021045	0.019394
A3-CS	0.000276	0.000290	0.000288	0.000278	0.000272	0.000292	0.000288	0.000269	0.000245	0.000306	0.000309	0.000303	0.000300	0.000274	0.000309	0.000236	0.000255	0.000207
A5-CS	0.003472	0.003301	0.003365	0.003558	0.003336	0.003194	0.002991	0.003719	0.008016	0.002941	0.002977	0.002946	0.003619	0.002663	0.002977	0.003740	0.003993	0.003780
A6-CS	0.000390	0.000372	0.000425	0.000821	0.000382	0.000361	0.000476	0.001301	0.000273	0.000338	0.000342	0.000357	0.001026	0.000308	0.000342	0.000420	0.001033	0.000336
A7-CS	0.001022	0.000981	0.001130	0.002272	0.001008	0.000954	0.001302	0.003661	0.000731	0.000903	0.000914	0.000958	0.002870	0.000825	0.000914	0.001148	0.002898	0.000912
A8-CS	0.003016	0.002868	0.003169	0.005385	0.002933	0.002776	0.003334	0.008042	0.003138	0.002561	0.002593	0.002666	0.006512	0.002331	0.002593	0.003150	0.006610	0.002682
A10-CS	0.008035	0.008307	0.015995	0.010787	0.007829	0.008334	0.030871	0.011662	0.008300	0.010351	0.010480	0.013383	0.012196	0.009272	0.010480	0.020981	0.013330	0.009262
A11-CS	0.003021	0.002968	0.002955	0.002758	0.002870	0.002914	0.003092	0.002888	0.002801	0.003556	0.003601	0.003499	0.003280	0.003182	0.003601	0.003029	0.002855	0.003001
A12-CS	0.008023	0.007702	0.008873	0.017833	0.007914	0.007485	0.010224	0.028738	0.005739	0.007090	0.007179	0.007519	0.022530	0.006480	0.007179	0.009009	0.022746	0.007159

	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
A1-TL	0.027411	0.028735	0.029693	0.041138	0.026816	0.028990	0.039339	0.045187	0.030625	0.038934	0.039421	0.038780	0.047157	0.034849	0.039421	0.026559	0.052554	0.028290
A2-TL	0.003203	0.003082	0.003098	0.003001	0.003043	0.002998	0.002857	0.002690	0.002196	0.002698	0.002732	0.002691	0.002873	0.002426	0.002732	0.002984	0.002980	0.002846
A3-TL	0.002176	0.002282	0.002268	0.002187	0.002140	0.002303	0.002271	0.002120	0.001933	0.002407	0.002337	0.002389	0.002366	0.002160	0.002437	0.001859	0.002007	0.001631
A4-TL	0.000435	0.000456	0.000454	0.000437	0.000428	0.000461	0.000454	0.000424	0.000387	0.000481	0.000487	0.000478	0.000473	0.000432	0.000487	0.000372	0.000401	0.000326
A5-TL	0.001297	0.001233	0.001255	0.001313	0.001246	0.001193	0.001112	0.001356	0.003022	0.001099	0.001112	0.001100	0.001329	0.000995	0.001112	0.001398	0.001470	0.001417
A6-TL	0.000062	0.000059	0.000066	0.000122	0.000060	0.000057	0.000072	0.000189	0.000042	0.000052	0.000053	0.000055	0.000151	0.000048	0.000053	0.000063	0.000151	0.000051
A7-TL	0.000102	0.000098	0.000113	0.000227	0.000101	0.000095	0.000130	0.000366	0.000073	0.000090	0.000091	0.000096	0.000287	0.000083	0.000091	0.000115	0.000290	0.000091
A8-TL	0.000850	0.000805	0.000880	0.001425	0.000822	0.000777	0.000898	0.002073	0.000877	0.000708	0.000717	0.000734	0.001696	0.000644	0.000717	0.000853	0.001718	0.000733
A9-TL	0.040154	0.043229	0.043200	0.045897	0.039722	0.044068	0.055945	0.052192	0.050634	0.064812	0.065622	0.063784	0.060422	0.057986	0.065622	0.033496	0.061021	0.045144
A10-TL	0.004687	0.004841	0.009473	0.006299	0.004565	0.004855	0.018242	0.006816	0.004844	0.006042	0.006118	0.007871	0.007125	0.005413	0.006118	0.012349	0.007783	0.005350
A11-TL	0.002815	0.002765	0.002754	0.002570	0.002674	0.002715	0.002881	0.002691	0.002610	0.003314	0.003355	0.003261	0.003056	0.002965	0.003355	0.002823	0.002661	0.002796
A12-TL	0.001380	0.001324	0.001526	0.003067	0.001361	0.001287	0.001758	0.004942	0.000987	0.001219	0.001235	0.001293	0.003875	0.001114	0.001235	0.001549	0.003912	0.001231
A1-TS	0.079159	0.082459	0.084801	0.112806	0.077210	0.082981	0.110392	0.123282	0.087169	0.110814	0.112199	0.110202	0.129930	0.099179	0.112199	0.076045	0.140296	0.079119
A2-TS	0.022825	0.021958	0.022064	0.021256	0.021714	0.021362	0.019829	0.019103	0.015725	0.019345	0.019587	0.019283	0.020416	0.017407	0.019587	0.020782	0.020943	0.019979
A3-TS	0.001312	0.001377	0.001368	0.001319	0.001291	0.001389	0.001370	0.001279	0.001166	0.001452	0.001470	0.001441	0.001427	0.001303	0.001470	0.001121	0.001211	0.000984
A4-TS	0.004061	0.004261	0.004234	0.004083	0.003994	0.004300	0.004239	0.003957	0.003607	0.004493	0.004549	0.004460	0.004417	0.004033	0.004549	0.003471	0.003746	0.003045
A5-TS	0.004174	0.003966	0.004040	0.004257	0.004009	0.003837	0.003581	0.004429	0.009555	0.003526	0.003570	0.003531	0.004320	0.003193	0.003570	0.004470	0.004760	0.004516
A6-TS	0.001853	0.001775	0.002036	0.004027	0.001823	0.001723	0.002320	0.006445	0.001314	0.001623	0.001644	0.001719	0.005066	0.001483	0.001644	0.002045	0.005109	0.001629
A7-TS	0.002044	0.001962	0.002261	0.004543	0.002016	0.001907	0.002605	0.007322	0.001462	0.001806	0.001829	0.001916	0.005740	0.001651	0.001829	0.002295	0.005795	0.001824
A8-TS	0.007519	0.007153	0.007906	0.013450	0.007313	0.006923	0.008328	0.020100	0.007916	0.006394	0.006474	0.006658	0.016273	0.005822	0.006474	0.007885	0.016529	0.006718
A10-TS	0.022891	0.023655	0.045749	0.030699	0.022300	0.023728	0.088055	0.033188	0.023628	0.029465	0.029834	0.038184	0.034709	0.026396	0.029834	0.059876	0.037953	0.026359
A11-TS	0.007484	0.007352	0.007321	0.006831	0.007109	0.007219	0.007659	0.007154	0.006938	0.008810	0.008920	0.008669	0.008124	0.007883	0.008920	0.007504	0.007073	0.007433
A12-TS	0.007410	0.007113	0.008195	0.016470	0.007309	0.006913	0.009443	0.026542	0.005300	0.006548	0.006630	0.006944	0.020808	0.005985	0.006630	0.008321	0.021008	0.006612
A13-TS	0.039798	0.029668	0.029640	0.021766	0.034068	0.025091	0.008267	0.007474	0.007607	0.009734	0.009856	0.009556	0.008481	0.008780	0.009856	0.006933	0.006718	0.006738
A1-HTL	0.003897	0.004089	0.004231	0.005926	0.003814	0.004126	0.005666	0.006510	0.004349	0.005528	0.005597	0.005509	0.006771	0.004948	0.005597	0.003783	0.007607	0.004029
A2-HTL	0.001099	0.001044	0.001050	0.001006	0.001036	0.001011	0.000902	0.000871	0.000701	0.000857	0.000868	0.000856	0.000928	0.000770	0.000868	0.000944	0.000964	0.000899
A5-HTL	0.000277	0.000264	0.000269	0.000286	0.000266	0.000255	0.000240	0.000301	0.000648	0.000236	0.000239	0.000236	0.000292	0.000213	0.000239	0.000301	0.000323	0.000304
A6-HTL	0.000047	0.000044	0.000048	0.000074	0.000045	0.000042	0.000046	0.000104	0.000030	0.000037	0.000037	0.000038	0.000086	0.000033	0.000037	0.000041	0.000085	0.000034
A7-HTL	0.000015	0.000015	0.000017	0.000034	0.000015	0.000014	0.000020	0.000055	0.000011	0.000014	0.000014	0.000014	0.000043	0.000012	0.000014	0.000017	0.000043	0.000014
A8-HTL	0.000105	0.000097	0.000105	0.000156	0.000099	0.000093	0.000099	0.000215	0.000065	0.000081	0.000082	0.000083	0.000179	0.000073	0.000082	0.000088	0.000177	0.000074
A10-HTL	0.000467	0.000483	0.000919	0.000625	0.000455	0.000485	0.001768	0.000674	0.000481	0.000600	0.000608	0.000772	0.000706	0.000537	0.000608	0.001210	0.000773	0.000544
A11-HTL	0.001030	0.001012	0.001007	0.000940	0.000978	0.000993	0.001054	0.000985	0.000955	0.001212	0.001228	0.001193	0.001118	0.001085	0.001228	0.001033	0.000973	0.001023
A12-HTL	0.000189	0.000182	0.000209	0.000420	0.000187	0.000176	0.000241	0.000677	0.000135	0.000167	0.000169	0.000177	0.000531	0.000153	0.000169	0.000212	0.000536	0.000169
A1-HTS	0.017807	0.018678	0.019119	0.024540	0.017422	0.018848	0.026243	0.026937	0.019804	0.025170	0.025485	0.025003	0.028676	0.022528	0.025485	0.017056	0.030962	0.018041
A2-HTS	0.019518	0.018686	0.018779	0.018044	0.018507	0.018138	0.016549	0.015990	0.013058	0.016033	0.016233	0.015993	0.017064	0.014421	0.016233	0.017291	0.017547	0.016560
A4-HTS	0.003806	0.003993	0.003968	0.003826	0.003743	0.004029	0.003972	0.003708	0.003380	0.004210	0.004263	0.004179	0.004139	0.003779	0.004263	0.003252	0.003511	0.002853
A5-HTS	0.001056	0.001004	0.001024	0.001093	0.001015	0.000971	0.000912	0.001153	0.002398	0.000893	0.000904	0.000895	0.001116	0.000809	0.000904	0.001132	0.001226	0.001140
A6-HTS	0.001065	0.001020	0.001169	0.002306	0.001047	0.000990	0.001330	0.003687	0.000754	0.000932	0.000943	0.000986	0.002899	0.000851	0.000943	0.001172	0.002923	0.000934
A7-HTS	0.000613	0.000589	0.000678	0.001363	0.000605	0.000572	0.000781	0.002197	0.000439	0.000542	0.000549	0.000575	0.001722	0.000495	0.000549	0.000689	0.001739	0.000547
A8-HTS	0.004781	0.004557	0.005083	0.008996	0.004664	0.004415	0.005467	0.013711	0.004689	0.004100	0.004152	0.004287	0.011006	0.003736	0.004152	0.005090	0.011162	0.004271
A10-HTS	0.011688	0.012077	0.023414	0.015679	0.011386	0.012114	0.045056	0.016953	0.012066	0.015048	0.015236	0.019522	0.017729	0.013481	0.015236	0.030616	0.019383	0.013439
A11-HTS	0.002472	0.002428	0.002418	0.002256	0.002348	0.002384	0.002529	0.002363	0.002291	0.002910	0.002946	0.002863	0.002604	0.002946	0.002478	0.002336	0.002455	
A12-HTS	0.006490	0.006230	0.007177	0.014425	0.006402	0.006055	0.008271	0.023247	0.004642	0.005735	0.005807	0.006082	0.018225	0.005242	0.005807	0.007288	0.018400	0.005791



	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
A13-HTS	0.013600	0.010138	0.010129	0.007438	0.011642	0.008574	0.002825	0.002554	0.002600	0.003326	0.003368	0.003265	0.002898	0.003000	0.003368	0.002369	0.002296	0.002302
A1-LL	0.000555	0.000583	0.000594	0.000736	0.000543	0.000589	0.000807	0.000811	0.000627	0.000797	0.000807	0.000791	0.000875	0.000714	0.000807	0.000524	0.000930	0.000568
A2-LL	0.000333	0.000318	0.000320	0.000308	0.000315	0.000308	0.000283	0.000270	0.000266	0.000270	0.000266	0.000287	0.000239	0.000270	0.000297	0.000300	0.000283	
A5-LL	0.000089	0.000085	0.000086	0.000088	0.000085	0.000082	0.000076	0.000088	0.000213	0.000076	0.000076	0.000075	0.000088	0.000068	0.000076	0.000097	0.000098	0.000098
A6-LL	1.000032	0.000029	0.000031	0.000040	0.000030	0.000028	0.000027	0.000049	0.000019	0.000023	0.000024	0.000024	0.000043	0.000021	0.000024	0.000024	0.000042	0.000020
A7-LL	0.000010	1.000010	0.000011	0.000023	0.000010	0.000010	0.000013	0.000037	0.000007	0.000009	0.000009	0.000010	0.000029	0.000008	0.000009	0.000011	0.000029	0.000009
A8-LL	0.000079	0.000073	1.000076	0.000099	0.000074	0.000070	0.000067	0.000124	0.000047	0.000058	0.000059	0.000059	0.000108	0.000053	0.000059	0.000059	0.000105	0.000051
A10-LL	0.000164	0.000170	0.000310	1.000217	0.000160	0.000171	0.000590	0.000233	0.000168	0.000209	0.000212	0.000264	0.000244	0.000187	0.000212	0.000413	0.000269	0.000198
A11-LL	0.000412	0.000405	0.000403	0.000376	1.000391	0.000397	0.000422	0.000394	0.000382	0.000485	0.000491	0.000477	0.000447	0.000434	0.000491	0.000413	0.000389	0.000409
A12-LL	0.000051	0.000049	0.000057	0.000114	0.000050	1.000048	0.000065	0.000183	0.000037	0.000045	0.000046	0.000048	0.000144	0.000041	0.000046	0.000057	0.000145	0.000046
A1-LS	0.004517	0.004724	0.004814	0.005921	0.004413	0.004762	1.006849	0.006471	0.004931	0.006260	0.006338	0.006213	0.006948	0.005603	0.006338	0.004334	0.007352	0.004451
A2-LS	0.003715	0.003586	0.003605	0.003494	0.003540	0.003495	0.003356	1.003167	0.002606	0.003208	0.003248	0.003197	0.003386	0.002886	0.003248	0.003487	0.003483	0.003333
A5-LS	0.000455	0.000433	0.000441	0.000461	0.000437	0.000419	0.000391	0.000477	1.001074	0.000387	0.000391	0.000387	0.000467	0.000350	0.000391	0.000494	0.000518	0.000501
A6-LS	0.000420	0.000402	0.000462	0.000917	0.000413	0.000391	0.000528	0.001471	0.000298	1.000368	0.000373	0.000390	0.001155	0.000337	0.000373	0.000465	0.001165	0.000370
A7-LS	0.000307	0.000294	0.000339	0.000682	0.000302	0.000286	0.000391	0.001098	0.000219	0.000271	1.000274	0.000287	0.000861	0.000248	0.000274	0.000344	0.000869	0.000274
A8-LS	0.001905	0.001826	0.002087	0.004077	0.001874	0.001773	0.002369	0.006496	0.001506	0.001673	0.001694	1.001768	0.005117	0.001528	0.001694	0.002118	0.005173	0.001707
A10-LS	0.002178	0.002252	0.004317	0.002920	0.002122	0.002259	0.002831	0.003155	0.002248	0.002803	0.002838	0.003617	1.003300	0.002511	0.002838	0.005670	0.003610	0.002521
A11-LS	0.005767	0.005666	0.005642	0.005264	0.005479	0.005563	0.005902	0.005514	0.005347	0.006789	0.006874	0.006681	0.006261	1.006075	0.006874	0.005783	0.005451	0.005729
A12-LS	0.000731	0.000701	0.000808	0.001624	0.000721	0.000682	0.000931	0.002618	0.000523	0.000646	0.000654	0.000685	0.002052	0.000590	1.000654	0.000821	0.002072	0.000652
A1-OL	0.010290	0.010848	0.011236	0.015869	0.010094	0.010969	0.015348	0.017519	0.011636	0.014790	0.014975	0.014743	0.018197	0.013238	0.014975	1.010215	0.020632	0.010909
A2-OL	0.002753	0.002597	0.002612	0.002501	0.002582	0.002504	0.002213	0.002115	0.001670	0.002034	0.002060	0.002035	0.002244	0.001827	0.002060	0.002267	1.002342	0.002125
A3-OL	0.001520	0.001594	0.001584	0.001528	0.001494	0.001609	0.001586	0.001481	0.001350	0.001681	0.001702	0.001669	0.001653	0.001509	0.001702	0.001299	0.001402	1.001139
A5-OL	0.000455	0.000433	0.000441	0.000461	0.000437	0.000419	0.000391	0.000477	0.001074	0.000387	0.000391	0.000387	0.000467	0.000350	0.000391	0.000494	0.000518	0.000501
A6-OL	0.000077	0.000073	0.000083	0.000156	0.000075	0.000071	0.000091	0.000244	0.000053	0.000066	0.000067	0.000069	0.000194	0.000060	0.000067	0.000081	0.000195	0.000065
A7-OL	0.000077	0.000074	0.000085	0.000170	0.000076	0.000072	0.000098	0.000275	0.000055	0.000068	0.000069	0.000072	0.000215	0.000062	0.000069	0.000086	0.000217	0.000068
A8-OL	0.000417	0.000399	0.000409	0.000453	0.000403	0.000388	0.000377	0.000500	0.001057	0.000364	0.000369	0.000366	0.000475	0.000331	0.000369	0.000481	0.000530	0.000487
A9-OL	0.051537	0.055440	0.055422	0.059112	0.050964	0.056499	0.071993	0.067082	0.065196	0.083484	0.084527	0.082153	0.077708	0.074691	0.084527	0.042966	0.078470	0.059005
A10-OL	0.006507	0.006716	0.013301	0.008742	0.006337	0.006734	0.025519	0.009465	0.006723	0.008387	0.008491	0.010988	0.009891	0.007513	0.008491	0.017249	0.010804	0.007386
A11-OL	0.000893	0.000877	0.000873	0.000815	0.000848	0.000861	0.000913	0.000853	0.000827	0.001051	0.001064	0.001034	0.000969	0.000940	0.001064	0.000895	0.000844	0.000887
A12-OL	0.000485	0.000466	0.000537	0.001079	0.000479	0.000453	0.000619	0.001739	0.000347	0.000429	0.000434	0.000455	0.001363	0.000392	0.000434	0.000545	0.001376	0.000433
A1-OS	0.008991	0.009368	0.009579	0.012166	0.008769	0.009428	0.012553	0.013295	0.009913	0.012605	0.012762	0.012512	0.014200	0.011281	0.012762	0.008561	0.014986	0.008925
A2-OS	0.007736	0.007360	0.007400	0.007107	0.007300	0.007125	0.006451	0.006177	0.004970	0.006082	0.006158	0.006074	0.006576	0.005467	0.006158	0.006673	0.006811	0.006323
A5-OS	0.002300	0.002189	0.002231	0.002363	0.002212	0.002119	0.001990	0.002477	0.005391	0.001956	0.001980	0.001959	0.002409	0.001771	0.001980	0.002499	0.002664	0.002529
A6-OS	0.000129	0.000122	0.000137	0.000249	0.000125	0.000118	0.000147	0.000382	0.000088	0.000108	0.000110	0.000114	0.000305	0.000099	0.000110	0.000130	0.000306	0.000105
A7-OS	0.000153	0.000147	0.000170	0.000341	0.000151	0.000143	0.000195	0.000549	0.000110	0.000135	0.000137	0.000144	0.000431	0.000124	0.000137	0.000172	0.000435	0.000137
A8-OS	0.000947	0.000904	0.001010	0.001794	0.000925	0.000877	0.001091	0.002741	0.000966	0.000817	0.000827	0.000854	0.002199	0.000745	0.000827	0.001022	0.002234	0.000860
A10-OS	0.003964	0.004100	0.007863	0.005323	0.003863	0.004113	0.015197	0.005754	0.004096	0.005108	0.005171	0.006592	0.006018	0.004576	0.005171	0.010332	0.006578	0.004577
A11-OS	0.002733	0.002684	0.002673	0.002494	0.002596	0.002636	0.002796	0.002612	0.002533	0.003217	0.003257	0.003165	0.002966	0.002878	0.003257	0.002740	0.002583	0.002714
A12-OS	0.002095	0.002011	0.002317	0.004657	0.002067	0.001955	0.002670	0.007505	0.001499	0.001852	0.001875	0.001964	0.005884	0.001692	0.001875	0.002353	0.005940	0.001870
A14	0.078694	0.085205	0.085364	0.089160	0.078141	0.087050	0.103160	0.102735	0.090003	0.113814	0.115237	0.112553	0.114174	0.101903	0.115237	0.066246	0.118233	0.082953
A15	0.410079	0.384044	0.389543	0.387072	0.448355	0.369040	0.349747	0.443851	0.290893	0.364372	0.368927	0.362660	0.377091	0.349974	0.368927	0.344898	0.391905	0.353311
C-1	0.232708	0.250449	0.250617	0.267798	0.230222	0.255282	0.327858	0.304312	0.288810	0.369044	0.373657	0.363514	0.349265	0.330215	0.373657	0.209649	0.354283	0.262595
C-2	0.057199	0.055455	0.069245	0.217087	0.054320	0.054137	0.089715	0.230876	0.041692	0.051312	0.051953	0.056639	0.197799	0.046055	0.051953	0.073415	0.285354	0.050741

	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
C-3	0.231957	0.254439	0.250838	0.242827	0.231300	0.261227	0.318847	0.276575	0.294934	0.376721	0.381430	0.369856	0.328276	0.337048	0.381430	0.190143	0.212665	0.154492
C-4	0.021769	0.020933	0.023363	0.036890	0.020605	0.020361	0.025404	0.048283	0.014855	0.018229	0.018456	0.019136	0.045559	0.016368	0.018456	0.022683	0.163693	0.077237
C-5	0.037762	0.039832	0.039785	0.041244	0.037011	0.040284	0.055015	0.044423	0.041553	0.052816	0.053476	0.052110	0.050662	0.047266	0.053476	0.030666	0.049679	0.036361
C-6	0.008894	0.008403	0.008421	0.007892	0.008310	0.008108	0.008245	0.007554	0.007392	0.009359	0.009476	0.009223	0.008657	0.008374	0.009476	0.005721	0.006568	0.005100
C-7	0.033052	0.033469	0.034264	0.047553	0.031818	0.033293	0.056341	0.046287	0.053653	0.070432	0.071313	0.068876	0.056958	0.062946	0.071313	0.025896	0.047555	0.088909
C-8	0.030659	0.033056	0.033217	0.035801	0.030384	0.033717	0.064980	0.040954	0.034928	0.044195	0.044747	0.043734	0.045192	0.039568	0.044747	0.036768	0.047099	0.032149
C-9	0.000655	0.000766	0.000774	0.000839	0.000674	0.000805	0.001141	0.001043	0.000996	0.001255	0.001271	0.001241	0.001185	0.001123	0.001271	0.001694	0.001388	0.001831
C-10	0.032647	0.035903	0.035797	0.036273	0.032709	0.036896	0.037609	0.036657	0.031000	0.038093	0.038569	0.037986	0.039944	0.034165	0.038569	0.027417	0.033537	0.022217
C-11	0.001798	0.001753	0.002151	0.001831	0.001711	0.001716	0.002740	0.010533	0.001328	0.001636	0.001657	0.001789	0.008192	0.001469	0.001657	0.002240	0.022297	0.010660
C-12	0.149709	0.150886	0.150204	0.143795	0.143748	0.149794	0.171319	0.151115	0.154294	0.196313	0.198767	0.193027	0.176179	0.175627	0.198767	0.135938	0.137056	0.125034
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.178173	0.165958	0.166879	0.156915	0.165917	0.159068	0.124968	0.127461	0.099592	0.120684	0.122192	0.120945	0.134918	0.108301	0.122192	0.132246	0.140996	0.125841
C-15	0.041532	0.041596	0.041696	0.040685	0.040747	0.041186	0.042087	0.040958	0.036072	0.045048	0.045611	0.044652	0.044265	0.040672	0.045611	0.044642	0.043521	0.044365
C-16	0.004212	0.004337	0.004376	0.004380	0.004085	0.004345	0.004488	0.004301	0.003677	0.004536	0.004593	0.004524	0.004710	0.004063	0.004593	0.006952	0.005916	0.007375
C-17	0.011118	0.011901	0.012149	0.015510	0.010975	0.012105	0.031415	0.016542	0.011884	0.014730	0.014914	0.014689	0.017416	0.013189	0.014914	0.022296	0.018812	0.015351
C-18	0.026965	0.028288	0.028111	0.027108	0.026519	0.028548	0.028144	0.026275	0.023951	0.029832	0.030205	0.029610	0.029324	0.026774	0.030205	0.023043	0.024873	0.020217
C-19	0.089952	0.086347	0.099479	0.199933	0.088727	0.083921	0.114630	0.322197	0.064337	0.079489	0.080482	0.084298	0.252592	0.072651	0.080482	0.101008	0.255019	0.080265
C-20	0.054252	0.048995	0.048864	0.043221	0.049719	0.046266	0.034412	0.032524	0.029231	0.036220	0.036672	0.035961	0.036262	0.032432	0.036672	0.030883	0.032541	0.028274
C-21	0.025448	0.024616	0.024845	0.024180	0.024791	0.024006	0.022675	0.023230	0.080861	0.023125	0.023414	0.023048	0.024095	0.020985	0.023414	0.032060	0.028772	0.033735
C-22	0.100441	0.103639	0.206316	0.134963	0.097799	0.103895	0.395457	0.146163	0.103775	0.129469	0.131088	0.170053	0.152732	0.115986	0.131088	0.267008	0.166799	0.113663
C-23	0.324410	0.297138	0.296845	0.266665	0.299054	0.282527	0.243806	0.222888	0.214062	0.269065	0.272429	0.265843	0.254171	0.240798	0.272429	0.236119	0.229691	0.229472
C-24	0.033821	0.038506	0.038739	0.041595	0.034347	0.040074	0.047638	0.046133	0.039668	0.048884	0.049495	0.048648	0.050568	0.043781	0.049495	0.042214	0.047064	0.039126
C-25	0.086979	0.085441	0.085081	0.079393	0.082625	0.083894	0.089009	0.083150	0.080635	0.102389	0.103669	0.100750	0.094421	0.091620	0.103669	0.087216	0.082204	0.086392
C-26	0.075731	0.056455	0.056402	0.041417	0.064827	0.047745	0.015731	0.014222	0.014476	0.018522	0.018754	0.018183	0.016139	0.016707	0.018754	0.013192	0.012783	0.012821
C-27	0.051848	0.048400	0.053959	0.078812	0.114954	0.046439	0.058303	0.174831	0.037164	0.046423	0.047003	0.048169	0.072352	0.065395	0.047003	0.066565	0.115150	0.084713
Ld-BL	0.039260	0.040938	0.042098	0.055606	0.038327	0.041213	0.055062	0.060760	0.043937	0.054704	0.055388	0.054417	0.064040	0.048968	0.055388	0.037722	0.069412	0.039461
Ld-BS	0.069338	0.072107	0.074025	0.096530	0.067612	0.072514	0.096221	0.105349	0.077971	0.096135	0.097337	0.095572	0.111374	0.086054	0.097337	0.066322	0.119573	0.069153
Ld-CL	0.010768	0.011293	0.011677	0.016186	0.010548	0.011394	0.015456	0.017792	0.012567	0.015127	0.015316	0.015078	0.018488	0.013544	0.015316	0.010577	0.020803	0.011281
Ld-CS	0.023518	0.024501	0.025206	0.033499	0.022954	0.024657	0.032983	0.036633	0.026638	0.032724	0.033133	0.032555	0.038525	0.029293	0.033133	0.022679	0.041917	0.023740
Ld-TL	0.013212	0.013828	0.014281	0.019637	0.012922	0.013941	0.018779	0.021535	0.014969	0.018594	0.018826	0.018521	0.022473	0.016645	0.018826	0.012814	0.024994	0.013608
Ld-TS	0.036705	0.038169	0.039269	0.051968	0.035791	0.038383	0.050833	0.056737	0.041191	0.050947	0.051584	0.050680	0.059745	0.045604	0.051584	0.035372	0.064505	0.036722
Ld-HTL	0.001866	0.001953	0.002020	0.002814	0.001825	0.001969	0.002685	0.003088	0.002129	0.002620	0.002653	0.002611	0.003209	0.002345	0.002653	0.001815	0.003604	0.001930
Ld-HTS	0.007409	0.007756	0.007944	0.010154	0.007246	0.007820	0.010834	0.011137	0.008409	0.010381	0.010510	0.010315	0.011840	0.009292	0.010510	0.007122	0.012786	0.007516
Ld-LL	0.000274	0.000287	0.000292	0.000359	0.000268	0.000289	0.000391	0.000394	0.000327	0.000386	0.000391	0.000383	0.000424	0.000346	0.000391	0.000261	0.000451	0.000282
Ld-LS	0.001497	0.001559	0.001591	0.001941	0.001462	0.001569	0.016863	0.003587	0.150972	0.002036	0.002061	0.002022	0.003540	0.001823	0.002061	0.001450	0.002400	0.001483
Ld-OL	0.005032	0.005291	0.005477	0.007644	0.004933	0.005345	0.007394	0.008409	0.005724	0.007125	0.007215	0.007104	0.008738	0.006379	0.007215	0.473617	0.030283	0.059841
Ld-OS	0.004522	0.004676	0.004782	0.005984	0.004404	0.004691	0.006109	0.006512	0.005379	0.006118	0.006194	0.006077	0.006920	0.005478	0.006194	0.004351	0.007320	0.004515
Ld-LSO	0.003237	0.003378	0.003470	0.004569	0.003160	0.003402	0.013928	0.004998	0.003573	0.004541	0.004598	0.004515	0.005282	0.004065	0.004598	0.003103	0.005702	0.003245
Lb-BL	0.014396	0.014014	0.015841	0.020227	0.013862	0.013705	0.018721	0.025974	0.011739	0.014143	0.014320	0.014759	0.023347	0.012748	0.014320	0.015897	0.023790	0.013162
Lb-BS	0.072875	0.070466	0.081972	0.104843	0.070149	0.068710	0.099092	0.136380	0.059505	0.069179	0.070044	0.073278	0.120658	0.062434	0.070044	0.082988	0.123347	0.065109
Lb-CL	0.006218	0.006035	0.006747	0.008448	0.005988	0.005894	0.007853	0.010926	0.005297	0.006215	0.006292	0.006442	0.009872	0.005603	0.006292	0.006926	0.009864	0.005826
Lb-CS	0.029371	0.028829	0.033947	0.043284	0.028453	0.028298	0.043017	0.056347	0.024961	0.030009	0.030384	0.031815	0.050438	0.027066	0.030384	0.035176	0.051806	0.027529
Lb-TL	0.007960	0.007965	0.009015	0.011090	0.007734	0.007883	0.011469	0.013599	0.007628	0.009141	0.009256	0.009465	0.012920	0.008222	0.009256	0.009079	0.013365	0.007774

	A6-LL	A7-LL	A8-LL	A10-LL	A11-LL	A12-LL	A1-LS	A2-LS	A5-LS	A6-LS	A7-LS	A8-LS	A10-LS	A11-LS	A12-LS	A1-OL	A2-OL	A3-OL
	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Lb-TS	0.062726	0.060685	0.072567	0.083824	0.060199	0.059186	0.091970	0.102380	0.052747	0.062728	0.063513	0.066928	0.094740	0.056509	0.063513	0.072460	0.096897	0.054772
Lb-HTL	0.000868	0.000850	0.000959	0.001160	0.000836	0.000834	0.001159	0.001484	0.000744	0.000919	0.000930	0.000953	0.001370	0.000827	0.000930	0.000997	0.001356	0.000826
Lb-HTS	0.036277	0.034884	0.042560	0.048960	0.034778	0.033930	0.054134	0.060982	0.028450	0.034252	0.034681	0.037078	0.055203	0.030890	0.034681	0.042983	0.056387	0.031175
Lb-LL	0.254535	0.503210	0.103244	0.208626	0.170456	0.402618	0.000374	0.000361	0.000247	0.000294	0.000298	0.000305	0.000361	0.000264	0.000298	0.000326	0.000360	0.000273
Lb-LS	0.011331	0.011168	0.012554	0.014679	0.010945	0.010982	0.287199	0.207272	0.279968	1.001633	1.014153	0.644466	0.502972	0.587566	1.014153	0.013041	0.017033	0.010850
Lb-OL	0.002408	0.002315	0.002486	0.002491	0.002283	0.002251	0.002648	0.002598	0.001875	0.002313	0.002342	0.002359	0.002661	0.002076	0.002342	0.005815	0.104893	0.007256
Lb-OS	0.007342	0.007210	0.008299	0.010914	0.007129	0.007079	0.010201	0.014464	0.006570	0.007455	0.007548	0.007831	0.012826	0.006730	0.007548	0.008548	0.013066	0.006895
Lb-HRD	0.345543	0.595655	0.511002	0.427902	0.427154	0.694696	0.190606	0.160451	0.125546	0.112517	0.113924	0.117410	0.198864	0.101527	0.113924	0.286707	0.213244	0.124980
K-BL	0.028778	0.028937	0.032607	0.032927	0.027741	0.028700	0.040869	0.033901	0.027947	0.032165	0.032567	0.033342	0.035900	0.028839	0.032567	0.031652	0.036685	0.026284
K-BS	0.054542	0.052112	0.053757	0.056391	0.051551	0.050540	0.051821	0.054811	0.044001	0.047050	0.047638	0.047392	0.056014	0.042259	0.047638	0.047837	0.058333	0.044651
K-CL	0.012495	0.012552	0.012850	0.014186	0.012043	0.012445	0.014412	0.015211	0.013394	0.014654	0.014837	0.014599	0.016092	0.013136	0.014837	0.012114	0.016054	0.011978
K-CS	0.010975	0.010856	0.011584	0.013617	0.010556	0.010691	0.013298	0.015083	0.011682	0.011694	0.011840	0.011870	0.014970	0.010503	0.011840	0.011118	0.015742	0.010269
K-TL	0.005972	0.006077	0.006517	0.006967	0.005797	0.006057	0.007775	0.007517	0.006383	0.007031	0.007118	0.007135	0.007883	0.006306	0.007118	0.006265	0.007838	0.005633
K-TS	0.027197	0.025250	0.028554	0.028716	0.025431	0.024164	0.031364	0.028978	0.022054	0.023821	0.024118	0.024903	0.029159	0.021396	0.024118	0.024494	0.029541	0.019583
K-HTL	0.001234	0.001217	0.001269	0.001314	0.001179	0.001197	0.001405	0.001344	0.001236	0.001344	0.001361	0.001350	0.001439	0.001205	0.001361	0.001257	0.001453	0.001192
K-HTS	0.017054	0.014980	0.016215	0.015499	0.015615	0.013948	0.014038	0.014674	0.010227	0.011375	0.011517	0.011765	0.014348	0.010238	0.011517	0.011853	0.013753	0.009650
K-LL	0.475444	0.000431	0.400451	0.127424	0.433755	0.000420	0.000474	0.000448	0.000399	0.000440	0.000446	0.000444	0.000473	0.000395	0.000446	0.000449	0.000460	0.000410
K-LS	0.003344	0.003265	0.003517	0.003895	0.003205	0.003198	0.005587	0.182635	0.301593	0.003528	0.003573	0.315919	0.087449	0.309124	0.003573	0.003676	0.004369	0.003245
K-OL	0.007782	0.007949	0.011038	0.009401	0.007546	0.007936	0.017245	0.009931	0.008175	0.009585	0.009705	0.010740	0.010601	0.008589	0.009705	0.124850	0.186581	0.680570
K-OS	0.005945	0.005791	0.006467	0.006272	0.005675	0.005666	0.007535	0.006572	0.006178	0.005961	0.006035	0.006178	0.006774	0.005353	0.006035	0.006758	0.006806	0.005678
B-L	0.091178	0.091897	0.098600	0.116239	0.087996	0.091232	0.121697	0.126997	0.089315	0.108095	0.109447	0.109544	0.130353	0.096895	0.109447	0.093181	0.137363	0.087018
B-S	0.250858	0.277781	0.283030	0.321025	0.252269	0.286194	0.282078	0.327081	0.205806	0.237296	0.240262	0.241740	0.324025	0.213167	0.240262	0.249794	0.342811	0.213877
C-L	0.034059	0.034381	0.035851	0.043897	0.032932	0.034155	0.047807	0.048947	0.035144	0.040859	0.041369	0.040960	0.049829	0.036638	0.041369	0.034728	0.052882	0.034478
C-S	0.102387	0.127098	0.125617	0.137676	0.108255	0.136165	0.113791	0.129478	0.079715	0.090445	0.091575	0.092784	0.129282	0.081287	0.091575	0.109009	0.140148	0.087328
T-L	0.028982	0.029686	0.031657	0.039544	0.028204	0.029670	0.039744	0.044368	0.030338	0.036412	0.036867	0.036773	0.045105	0.032648	0.036867	0.031275	0.048811	0.030404
T-S	0.225518	0.290730	0.284352	0.286560	0.242207	0.315128	0.232350	0.238019	0.154663	0.173585	0.175755	0.179983	0.244163	0.156042	0.175755	0.223707	0.259898	0.160429
HT-L	0.005347	0.005290	0.005528	0.006479	0.005116	0.005211	0.006318	0.006935	0.005011	0.006001	0.006076	0.006025	0.007144	0.005379	0.006076	0.005428	0.007656	0.005356
HT-S	0.107492	0.136191	0.134656	0.132267	0.114665	0.146841	0.106488	0.110562	0.065487	0.073239	0.074154	0.077043	0.110148	0.065953	0.074154	0.105682	0.115910	0.072422
Lo-L	0.730417	0.504106	0.504171	0.336612	0.604643	0.403511	0.001435	0.001409	0.001116	0.001290	0.001306	0.001304	0.001468	0.001156	0.001306	0.001504	0.001644	0.001487
Lo-S	0.054779	0.081550	0.074204	0.068357	0.062962	0.091964	0.632021	0.412730	0.747401	1.020922	1.033684	0.976684	0.617358	0.910888	1.033684	0.053572	0.050381	0.034214
O-L	0.018191	0.018326	0.021797	0.022343	0.017522	0.018190	0.031583	0.023495	0.017934	0.021734	0.022006	0.022891	0.024805	0.019470	0.022006	0.060785	0.324646	0.750216
O-S	0.046918	0.065042	0.060903	0.058810	0.052121	0.071988	0.042144	0.043796	0.030604	0.031729	0.032125	0.032676	0.045724	0.028542	0.032125	0.050224	0.050568	0.037053
COM	0.056769	0.053932	0.054073	0.050716	0.053156	0.052170	0.049469	0.045574	0.041876	0.052327	0.052981	0.051845	0.051143	0.046841	0.052981	0.051514	0.049856	0.051086
FA1	0.050931	0.056763	0.058385	0.065059	0.051299	0.058620	0.063246	0.066408	0.045744	0.053757	0.054429	0.054679	0.067800	0.048235	0.054429	0.154945	0.122641	0.173374
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.022872	0.025490	0.026219	0.029216	0.023037	0.026325	0.028402	0.029822	0.020542	0.024141	0.024443	0.024555	0.030447	0.021661	0.024443	0.069581	0.055075	0.077857
FA4	0.095127	0.094965	0.095269	0.093785	0.091016	0.093897	0.127632	0.111289	0.120350	0.154690	0.156623	0.151421	0.132180	0.138320	0.156623	0.108296	0.104108	0.109187
FA5	0.038620	0.034120	0.034156	0.030209	0.035089	0.031866	0.026377	0.024201	0.023394	0.029465	0.029834	0.029071	0.027615	0.026367	0.029834	0.022350	0.023334	0.021238
FA6	0.018616	0.019503	0.019650	0.020329	0.018206	0.019671	0.025963	0.023910	0.023445	0.029722	0.030094	0.029259	0.027375	0.026593	0.030094	0.016655	0.020221	0.014782
FA7	0.022872	0.025490	0.026219	0.029216	0.023037	0.026325	0.028402	0.029822	0.020542	0.024141	0.024443	0.024555	0.030447	0.021661	0.024443	0.069581	0.055075	0.077857
FA8	0.145318	0.149650	0.150978	0.151106	0.140956	0.149898	0.154865	0.148386	0.126870	0.156503	0.158460	0.156090	0.162508	0.140172	0.158460	0.239861	0.204103	0.254453
FA9	0.005469	0.005196	0.005210	0.004886	0.005121	0.005026	0.004766	0.004391	0.004034	0.005041	0.005104	0.004995	0.004927	0.004513	0.005104	0.004963	0.004803	0.004922

	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-OS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
A1-BL	0.059867	0.086162	0.084506	0.085007	0.260817	0.059642	0.066609	0.081151	0.102129	0.146309	0.078282	0.095274	0.095812	0.097397	0.130611	0.095294	0.098365	0.258525
A2-BL	0.020206	0.022553	0.022613	0.023168	0.026791	0.017591	0.022998	0.022734	0.030460	0.026810	0.022247	0.026680	0.026172	0.026825	0.026147	0.026594	0.027919	0.026669
A3-BL	0.005263	0.007617	0.007480	0.006551	0.007285	0.004769	0.005818	0.007204	0.007194	0.007374	0.006146	0.007389	0.007648	0.007459	0.007642	0.007216	0.007505	0.007226
A5-BL	0.009986	0.002997	0.003088	0.003708	0.003106	0.003131	0.004110	0.003274	0.003017	0.003819	0.010242	0.002966	0.002973	0.003022	0.003553	0.003023	0.003068	0.003061
A6-BL	0.000386	0.000441	0.000443	0.000733	0.000601	0.000533	0.000523	0.000447	0.000679	0.001758	0.000433	0.000524	0.000513	0.000569	0.001372	0.000583	0.000549	0.000609
A7-BL	0.000375	0.000427	0.000429	0.000720	0.000588	0.000524	0.000511	0.000434	0.000660	0.001740	0.000416	0.000503	0.000493	0.000547	0.001355	0.000562	0.000526	0.000595
A8-BL	0.002674	0.001474	0.001495	0.002154	0.001798	0.001649	0.001831	0.001537	0.001957	0.004135	0.002848	0.001668	0.001642	0.001762	0.003356	0.001790	0.001743	0.001802
A9-BL	0.058896	0.091694	0.089230	0.076372	0.084443	0.053098	0.060443	0.084237	0.095655	0.129408	0.080567	0.098048	0.099724	0.098968	0.115325	0.096146	0.100590	0.084824
A10-BL	0.010372	0.012777	0.012645	0.058913	0.032981	0.009506	0.020377	0.012377	0.036930	0.020150	0.011531	0.013530	0.013671	0.020840	0.018189	0.021008	0.013933	0.034902
A11-BL	0.003099	0.003509	0.003563	0.003699	0.003234	0.002950	0.004076	0.003673	0.004401	0.004107	0.003906	0.004919	0.004653	0.004882	0.004046	0.004899	0.005246	0.003201
A12-BL	0.004130	0.004700	0.004724	0.007922	0.006466	0.005760	0.005624	0.004774	0.007258	0.019141	0.004575	0.005529	0.005423	0.006021	0.014905	0.006180	0.005786	0.006545
A1-BS	0.098005	0.140405	0.137794	0.138049	0.411555	0.097126	0.109393	0.132504	0.166063	0.233995	0.127992	0.155872	0.156568	0.159149	0.209773	0.155774	0.161033	0.405203
A2-BS	0.068438	0.077799	0.078045	0.080073	0.090552	0.060916	0.079805	0.078545	0.100591	0.092048	0.076607	0.092277	0.090453	0.092753	0.089892	0.091995	0.096603	0.090103
A3-BS	0.000551	0.000798	0.000784	0.000686	0.000763	0.000500	0.000609	0.000755	0.000754	0.000773	0.000644	0.000774	0.000801	0.000781	0.000801	0.000756	0.000786	0.000757
A5-BS	0.024838	0.007462	0.007689	0.009233	0.007734	0.007795	0.010231	0.008150	0.007516	0.009519	0.025480	0.007391	0.007407	0.007531	0.008854	0.007533	0.007646	0.007623
A6-BS	0.001157	0.001323	0.001329	0.002198	0.001804	0.001599	0.001569	0.001342	0.002036	0.005273	0.001299	0.001572	0.001539	0.001706	0.004117	0.001750	0.001647	0.001826
A7-BS	0.001314	0.001495	0.001503	0.002521	0.002057	0.001833	0.001789	0.001519	0.002309	0.006090	0.001456	0.001759	0.001759	0.001916	0.004742	0.001966	0.001841	0.002082
A8-BS	0.008436	0.005103	0.005168	0.007737	0.006402	0.005862	0.006331	0.005301	0.006982	0.015741	0.008976	0.005772	0.005684	0.006146	0.012619	0.006260	0.006218	0.006432
A10-BS	0.018976	0.022339	0.022118	0.099513	0.057227	0.016654	0.035028	0.021668	0.065314	0.034978	0.020214	0.023522	0.023791	0.035763	0.031611	0.036011	0.024207	0.060442
A11-BS	0.006255	0.007082	0.007191	0.007465	0.006527	0.005954	0.008226	0.007413	0.008883	0.008289	0.007882	0.009927	0.009390	0.009853	0.008165	0.009886	0.010587	0.006459
A12-BS	0.014793	0.016833	0.016921	0.028375	0.023160	0.020633	0.020143	0.017101	0.025996	0.068561	0.016388	0.019803	0.019423	0.021568	0.053387	0.022137	0.020725	0.023442
A13-BS	0.001702	0.002052	0.002064	0.002059	0.001874	0.001746	0.002179	0.002090	0.002364	0.002250	0.002068	0.002574	0.002493	0.002567	0.002248	0.002595	0.002712	0.001864
A1-CL	0.015734	0.023057	0.022558	0.023040	0.078763	0.015997	0.017285	0.021548	0.027541	0.041950	0.020693	0.025127	0.025380	0.025808	0.036887	0.025214	0.025879	0.077978
A2-CL	0.005751	0.006396	0.006407	0.006543	0.007713	0.004925	0.006441	0.006427	0.008771	0.007620	0.006279	0.007502	0.007375	0.007548	0.007427	0.007469	0.007841	0.007682
A3-CL	0.001955	0.002829	0.002778	0.002433	0.002706	0.001771	0.002161	0.002676	0.002672	0.002739	0.002283	0.002744	0.002841	0.002771	0.002839	0.002680	0.002787	0.002684
A5-CL	0.007571	0.002284	0.002353	0.002836	0.002374	0.002391	0.003131	0.002494	0.002308	0.002965	0.007765	0.002262	0.002267	0.002307	0.002746	0.002308	0.002340	0.002340
A6-CL	0.000084	0.000097	0.000097	0.000158	0.000130	0.000115	0.000113	0.000098	0.000148	0.000374	0.000096	0.000116	0.000114	0.000126	0.000293	0.000129	0.000122	0.000132
A7-CL	0.000300	0.000342	0.000344	0.000576	0.000470	0.000419	0.000409	0.000347	0.000528	0.001392	0.000333	0.000402	0.000394	0.000438	0.001084	0.000449	0.000421	0.000476
A8-CL	0.001564	0.000886	0.000898	0.001290	0.001080	0.000985	0.001092	0.000922	0.001183	0.002487	0.001675	0.001013	0.000995	0.001068	0.002020	0.001086	0.001059	0.001083
A9-CL	0.029194	0.045438	0.044218	0.037879	0.041861	0.026354	0.029971	0.041746	0.047399	0.064072	0.039907	0.048561	0.049396	0.049022	0.057202	0.047622	0.049818	0.042054
A10-CL	0.002503	0.002938	0.002907	0.013104	0.007554	0.002183	0.004596	0.002846	0.008649	0.004612	0.002666	0.003099	0.003134	0.004712	0.004167	0.004745	0.003189	0.007979
A11-CL	0.005184	0.005870	0.005960	0.006187	0.005410	0.004935	0.006818	0.006144	0.007362	0.006870	0.006533	0.008228	0.007783	0.008167	0.006767	0.008194	0.008774	0.005354
A12-CL	0.001599	0.001820	0.001830	0.003068	0.002504	0.002231	0.002178	0.001849	0.002811	0.007413	0.001772	0.002141	0.002100	0.002332	0.005772	0.002393	0.002241	0.002535
A1-CS	0.036447	0.052424	0.051419	0.051852	0.158458	0.036375	0.040581	0.049383	0.062215	0.089421	0.047630	0.057966	0.058292	0.059275	0.079780	0.057997	0.059847	0.158167
A2-CS	0.017106	0.019374	0.019464	0.020079	0.022283	0.015414	0.020224	0.019648	0.024784	0.022816	0.019077	0.023032	0.022550	0.023141	0.022294	0.022981	0.024126	0.022159
A3-CS	0.000201	0.000290	0.000285	0.000250	0.000278	0.000182	0.000222	0.000274	0.000281	0.000234	0.000281	0.000291	0.000284	0.000291	0.000291	0.000275	0.000286	0.000275
A5-CS	0.009986	0.002997	0.003088	0.003708	0.003106	0.003131	0.004110	0.003274	0.003017	0.003819	0.010242	0.002966	0.002973	0.003022	0.003553	0.003023	0.003068	0.003061
A6-CS	0.000278	0.000320	0.000321	0.000523	0.000432	0.000380	0.000376	0.000324	0.000490	0.001244	0.000317	0.000384	0.000375	0.000415	0.000974	0.000425	0.000403	0.000437
A7-CS	0.000751	0.000854	0.000859	0.001440	0.001176	0.001047	0.001022	0.000868	0.001320	0.003480	0.000832	0.001005	0.000986	0.001095	0.002710	0.001124	0.001052	0.001190
A8-CS	0.003527	0.002465	0.002489	0.003720	0.003109	0.002789	0.002972	0.002538	0.003466	0.007790	0.003849	0.002887	0.002828	0.003069	0.006238	0.003127	0.003024	0.003128
A10-CS	0.006858	0.008237	0.008155	0.037220	0.021141	0.006143	0.013019	0.007989	0.023907	0.012925	0.007438	0.008689	0.008785	0.013283	0.011676	0.013381	0.008944	0.022347
A11-CS	0.002479	0.002807	0.002851	0.002959	0.002587	0.002360	0.003261	0.002938	0.003521	0.003286	0.003125	0.003935	0.003722	0.003906	0.003236	0.003919	0.004196	0.002560
A12-CS	0.005895	0.006708	0.006743	0.011307	0.009229	0.008222	0.008026	0.006814	0.010359	0.027320	0.006530	0.007891	0.007739	0.008594	0.021273	0.008821	0.008258	0.009341

	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-JS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
A1-TL	0.019662	0.028549	0.027965	0.028515	0.093525	0.019883	0.021755	0.026781	0.034001	0.050888	0.025770	0.031322	0.031573	0.032123	0.044976	0.031408	0.032297	0.088226
A2-TL	0.002493	0.002722	0.002745	0.002871	0.003117	0.002253	0.002963	0.002791	0.003588	0.003180	0.002680	0.003235	0.003162	0.003248	0.003107	0.003234	0.003392	0.003096
A3-TL	0.001579	0.002285	0.002244	0.001965	0.002185	0.001431	0.001745	0.002161	0.002158	0.002212	0.001844	0.002217	0.002294	0.002238	0.002293	0.002165	0.002251	0.002168
A4-TL	0.000316	0.000457	0.000449	0.000393	0.000437	0.000286	0.000349	0.000432	0.000432	0.000442	0.000369	0.000443	0.000459	0.000448	0.000459	0.000433	0.000450	0.000434
A5-TL	0.003767	0.001120	0.001155	0.001382	0.001157	0.001169	0.001540	0.001225	0.001121	0.001396	0.003862	0.001106	0.001109	0.001126	0.001305	0.001126	0.001144	0.001140
A6-TL	0.000043	0.000050	0.000050	0.000078	0.000066	0.000057	0.000057	0.000050	0.000075	0.000183	0.000050	0.000061	0.000059	0.000065	0.000144	0.000067	0.000064	0.000066
A7-TL	0.000075	0.000085	0.000086	0.000144	0.000118	0.000105	0.000102	0.000087	0.000132	0.000348	0.000083	0.000101	0.000099	0.000109	0.000271	0.000112	0.000105	0.000119
A8-TL	0.000983	0.000682	0.000689	0.000996	0.000843	0.000748	0.000810	0.000701	0.000950	0.002027	0.001089	0.000814	0.000795	0.000859	0.001638	0.000874	0.000854	0.000847
A9-TL	0.028516	0.044434	0.043237	0.036918	0.040875	0.025626	0.029237	0.040811	0.046349	0.062711	0.039080	0.047569	0.048371	0.048002	0.055707	0.046636	0.048808	0.041049
A10-TL	0.003838	0.004789	0.004740	0.022255	0.012367	0.003566	0.007675	0.004640	0.013764	0.007558	0.004314	0.005075	0.005127	0.007841	0.006821	0.007906	0.005226	0.013093
A11-TL	0.002310	0.002616	0.002656	0.002757	0.002411	0.002199	0.003039	0.002738	0.003281	0.003062	0.002912	0.003667	0.003468	0.003640	0.003016	0.003652	0.003910	0.002386
A12-TL	0.001014	0.001154	0.001160	0.001945	0.001587	0.001414	0.001380	0.001172	0.001781	0.004698	0.001123	0.001357	0.001331	0.001478	0.003658	0.001517	0.001420	0.001606
A1-TS	0.057078	0.081385	0.079912	0.080870	0.238053	0.056939	0.064019	0.076928	0.096647	0.137808	0.074394	0.090626	0.090948	0.092605	0.123300	0.090688	0.093674	0.229819
A2-TS	0.017220	0.019371	0.019529	0.020365	0.021517	0.016059	0.021038	0.019848	0.024389	0.022691	0.019355	0.023559	0.022928	0.023626	0.022194	0.023592	0.024758	0.021359
A3-TS	0.000952	0.001378	0.001354	0.001185	0.001318	0.000863	0.001053	0.001304	0.001302	0.001334	0.001112	0.001337	0.001384	0.001350	0.001383	0.001306	0.001358	0.001308
A4-TS	0.002948	0.004265	0.004189	0.003669	0.004080	0.002670	0.003258	0.004034	0.004029	0.004130	0.003442	0.004138	0.004283	0.004177	0.004280	0.004041	0.004203	0.004047
A5-TS	0.011895	0.003591	0.003699	0.004431	0.003718	0.003739	0.004910	0.003919	0.003625	0.004560	0.012215	0.003573	0.003578	0.003638	0.004248	0.003639	0.003697	0.003665
A6-TS	0.001345	0.001536	0.001544	0.002558	0.002098	0.001861	0.001825	0.001559	0.002366	0.006143	0.001507	0.001823	0.001786	0.001980	0.004794	0.002030	0.001910	0.002123
A7-TS	0.001502	0.001709	0.001718	0.002881	0.002351	0.002095	0.002045	0.001736	0.002639	0.006960	0.001664	0.002010	0.001972	0.002190	0.005420	0.002247	0.002104	0.002380
A8-TS	0.008919	0.006159	0.006221	0.009306	0.007770	0.006981	0.007446	0.006345	0.008643	0.019459	0.009707	0.007189	0.007045	0.007644	0.015580	0.007790	0.007527	0.007814
A10-TS	0.019236	0.023456	0.023231	0.106806	0.060084	0.017543	0.037322	0.022773	0.067368	0.036773	0.021105	0.024732	0.025004	0.037932	0.033221	0.038222	0.025459	0.063545
A11-TS	0.006142	0.006954	0.007062	0.007331	0.006410	0.005847	0.008078	0.007279	0.008723	0.008140	0.007740	0.009748	0.009221	0.009676	0.008017	0.009708	0.010396	0.006343
A12-TS	0.005444	0.006195	0.006227	0.010443	0.008523	0.007593	0.007413	0.006293	0.009567	0.025232	0.006031	0.007288	0.007148	0.007937	0.019647	0.008147	0.007627	0.008627
A13-TS	0.005714	0.006888	0.006931	0.006914	0.006292	0.005862	0.007315	0.007018	0.007938	0.007555	0.006944	0.008642	0.008369	0.008618	0.007549	0.008712	0.009105	0.006257
A1-HTL	0.002781	0.004061	0.003975	0.004063	0.013460	0.002824	0.003063	0.003801	0.004852	0.007339	0.003652	0.004436	0.004477	0.004555	0.006470	0.004451	0.004570	0.013246
A2-HTL	0.000785	0.000888	0.000894	0.000926	0.001010	0.000716	0.000942	0.000905	0.001119	0.001041	0.000873	0.001056	0.001033	0.001061	0.001018	0.001054	0.001107	0.001004
A5-HTL	0.000808	0.000240	0.000248	0.000299	0.000249	0.000252	0.000331	0.000263	0.000241	0.000308	0.000827	0.000236	0.000237	0.000241	0.000286	0.000241	0.000244	0.000246
A6-HTL	0.000029	0.000035	0.000035	0.000049	0.000043	0.000035	0.000037	0.000035	0.000052	0.000104	0.000038	0.000047	0.000045	0.000049	0.000085	0.000049	0.000049	0.000043
A7-HTL	0.000011	0.000013	0.000013	0.000022	0.000018	0.000016	0.000015	0.000013	0.000020	0.000052	0.000012	0.000015	0.000015	0.000016	0.000041	0.000017	0.000016	0.000018
A8-HTL	0.000063	0.000077	0.000077	0.000103	0.000093	0.000075	0.000081	0.000077	0.000113	0.000218	0.000084	0.000104	0.000099	0.000108	0.000179	0.000110	0.000110	0.000093
A10-HTL	0.000406	0.000481	0.000476	0.002128	0.001217	0.000362	0.000758	0.000468	0.001377	0.000746	0.000431	0.000503	0.000509	0.000764	0.000675	0.000769	0.000518	0.001285
A11-HTL	0.000845	0.000957	0.000972	0.001009	0.000882	0.000805	0.001112	0.001002	0.001200	0.001120	0.001065	0.001342	0.001269	0.001332	0.001103	0.001336	0.001431	0.000873
A12-HTL	0.000139	0.000158	0.000159	0.000266	0.000217	0.000194	0.000189	0.000161	0.000244	0.000644	0.000154	0.000186	0.000182	0.000203	0.000501	0.000208	0.000195	0.000220
A1-HTS	0.012598	0.018528	0.018127	0.017691	0.056779	0.012341	0.013724	0.017316	0.021843	0.030433	0.016625	0.020200	0.020401	0.020621	0.027232	0.020132	0.020806	0.068453
A2-HTS	0.014344	0.016235	0.016349	0.016983	0.018157	0.013295	0.017412	0.016580	0.020427	0.019060	0.016188	0.019678	0.019173	0.019742	0.018639	0.019688	0.020667	0.018033
A4-HTS	0.002762	0.003997	0.003925	0.003438	0.003823	0.002502	0.003053	0.003781	0.003775	0.003870	0.003225	0.003877	0.004013	0.003914	0.004010	0.003786	0.003938	0.003792
A5-HTS	0.002983	0.000908	0.000936	0.001126	0.000944	0.000948	0.001240	0.000991	0.000923	0.001184	0.003064	0.000906	0.000907	0.000923	0.001096	0.000924	0.000937	0.000931
A6-HTS	0.000771	0.000882	0.000886	0.001466	0.001203	0.001066	0.001046	0.000895	0.001358	0.003515	0.000866	0.001048	0.001026	0.001137	0.001166	0.001166	0.001098	0.001217
A7-HTS	0.000451	0.000513	0.000515	0.000864	0.000705	0.000628	0.000613	0.000521	0.000792	0.002088	0.000499	0.000603	0.000592	0.000657	0.001626	0.000674	0.000631	0.000714
A8-HTS	0.005210	0.003934	0.003969	0.006093	0.005060	0.004538	0.004746	0.004041	0.005641	0.013210	0.005685	0.004600	0.004509	0.004917	0.010500	0.005019	0.004816	0.005097
A10-HTS	0.009764	0.011971	0.011855	0.054738	0.030698	0.008949	0.019084	0.011620	0.034346	0.018786	0.010769	0.012632	0.012769	0.019404	0.016969	0.019555	0.013005	0.032475
A11-HTS	0.002029	0.002297	0.002332	0.002421	0.002117	0.001931	0.002668	0.002404	0.002881	0.002688	0.002556	0.003220	0.003045	0.003196	0.002648	0.003206	0.003433	0.002095
A12-HTS	0.004768	0.005426	0.005454	0.009146	0.007465	0.006651	0.006493	0.005512	0.008379	0.022100	0.005282	0.006383	0.006261	0.006952	0.017208	0.007135	0.006680	0.007556



	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-JS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
A13-HTS	0.001953	0.002354	0.002368	0.002363	0.002150	0.002003	0.002500	0.002398	0.002713	0.002582	0.002373	0.002953	0.002860	0.002945	0.002580	0.002977	0.003111	0.002138
A1-LL	0.000392	0.000581	0.000568	0.000542	0.001871	0.000378	0.000424	0.000542	0.000677	0.000922	0.000522	0.000634	0.000641	0.000646	0.000828	0.000630	0.000653	0.002058
A2-LL	0.000248	0.000274	0.000276	0.000288	0.000314	0.000224	0.000295	0.000280	0.000353	0.000320	0.000268	0.000323	0.000317	0.000325	0.000313	0.000323	0.000338	0.000312
A5-LL	0.000267	0.000077	0.000080	0.000095	0.000079	0.000081	0.000107	0.000085	0.000076	0.000091	0.000273	0.000075	0.000076	0.000077	0.000086	0.000076	0.000078	0.000078
A6-LL	0.000018	0.000022	0.000022	0.000027	0.000025	0.000020	0.000022	0.000022	0.000032	0.000052	0.000025	0.000031	0.000030	0.000032	0.000044	0.000033	0.000033	0.000025
A7-LL	0.000008	0.000009	0.000009	0.000014	0.000012	0.000010	0.000010	0.000009	0.000013	0.000035	0.000008	0.000010	0.000010	0.000011	0.000027	0.000011	0.000011	0.000012
A8-LL	0.000044	0.000056	0.000055	0.000067	0.000063	0.000049	0.000055	0.000055	0.000080	0.000131	0.000063	0.000079	0.000075	0.000080	0.000111	0.000081	0.000084	0.000064
A10-LL	0.000153	0.000171	0.000170	0.000701	0.000415	0.000132	0.000265	0.000168	0.000475	0.000257	0.000151	0.000175	0.000177	0.000259	0.000234	0.000260	0.000179	0.000437
A11-LL	0.000338	0.000383	0.000389	0.000404	0.000353	0.000322	0.000445	0.000401	0.000480	0.000448	0.000426	0.000537	0.000508	0.000533	0.000441	0.000534	0.000572	0.000349
A12-LL	0.000038	0.000043	0.000043	0.000072	0.000059	0.000052	0.000051	0.000043	0.000066	0.000174	0.000042	0.000050	0.000049	0.000055	0.000135	0.000056	0.000053	0.000059
A1-LS	0.003163	0.004660	0.004559	0.004366	0.012636	0.003049	0.003430	0.004354	0.005505	0.007288	0.004169	0.005062	0.005117	0.005156	0.006591	0.005031	0.005211	0.020160
A2-LS	0.002910	0.003194	0.003221	0.003365	0.003622	0.002656	0.003479	0.003275	0.004208	0.003747	0.003185	0.003858	0.003759	0.003871	0.003661	0.003863	0.004052	0.003596
A5-LS	0.001341	0.000395	0.000407	0.000488	0.000408	0.000414	0.000545	0.000432	0.000393	0.000490	0.001373	0.000387	0.000388	0.000394	0.000458	0.000394	0.000400	0.000402
A6-LS	0.000305	0.000349	0.000350	0.000582	0.000477	0.000424	0.000415	0.000354	0.000537	0.001401	0.000341	0.000413	0.000404	0.000449	0.001093	0.000460	0.000432	0.000483
A7-LS	0.000225	0.000256	0.000258	0.000432	0.000353	0.000314	0.000307	0.000260	0.000396	0.001044	0.000250	0.000302	0.000296	0.000328	0.000813	0.000337	0.000316	0.000357
A8-LS	0.001592	0.001589	0.001599	0.002627	0.002151	0.001922	0.001909	0.001619	0.002407	0.006190	0.001750	0.001861	0.001826	0.002019	0.004841	0.002069	0.001948	0.002175
A10-LS	0.001873	0.002236	0.002215	0.010024	0.005710	0.001673	0.003529	0.002172	0.006462	0.003495	0.002015	0.002352	0.002379	0.003586	0.003159	0.002612	0.002420	0.006034
A11-LS	0.004733	0.005359	0.005442	0.005649	0.004939	0.004506	0.006225	0.005610	0.006722	0.006273	0.005965	0.007513	0.007106	0.007457	0.006179	0.007482	0.008011	0.004888
A12-LS	0.000537	0.000611	0.000614	0.001030	0.000841	0.000749	0.000731	0.000621	0.000944	0.002488	0.000595	0.000719	0.000705	0.000783	0.001938	0.000803	0.000752	0.000851
A1-OL	0.007414	0.010865	0.010630	0.010870	0.036665	0.007546	0.008145	0.010153	0.013016	0.019811	0.009732	0.011814	0.011939	0.012138	0.017414	0.011856	0.012164	0.039291
A2-OL	0.001904	0.002148	0.002154	0.002209	0.002522	0.001679	0.002198	0.002167	0.002823	0.002544	0.002113	0.002540	0.002491	0.002554	0.002483	0.002532	0.002658	0.002510
A3-OL	0.001103	0.001596	0.001567	0.001373	0.001526	0.000999	0.001219	0.001509	0.001507	0.001545	0.001288	0.001548	0.001602	0.001563	0.001601	0.001512	0.001572	0.001514
A5-OL	1.001341	0.000395	0.000407	0.000488	0.000408	0.000414	0.000545	0.000432	0.000393	0.000490	0.001373	0.000387	0.000388	0.000394	0.000458	0.000394	0.000400	0.000402
A6-OL	0.000054	1.000062	0.000063	0.000100	0.000083	0.000073	0.000072	0.000063	0.000095	0.000235	0.000063	0.000076	0.000074	0.000082	0.000185	0.000084	0.000080	0.000084
A7-OL	0.000056	0.000064	1.000064	0.000108	0.000088	0.000079	0.000077	0.000065	0.000099	0.000261	0.000062	0.000075	0.000074	0.000082	0.000203	0.000084	0.000079	0.000089
A8-OL	0.001327	0.000373	0.000386	1.000478	0.000391	0.000406	0.000530	0.000412	0.000365	0.000498	0.001343	0.000348	0.000353	0.000357	0.000456	0.000357	0.000358	0.000386
A9-OL	0.036550	0.056912	0.055382	0.047379	1.052402	0.032922	0.037503	0.052282	0.059379	0.080453	0.050025	0.060882	0.061917	0.061449	0.071563	0.059699	0.062464	0.052634
A10-OL	0.005136	0.006635	0.006568	0.031481	0.017155	1.004951	0.010776	0.006432	0.018786	0.010494	0.005951	0.007045	0.007114	0.010975	0.009467	0.011073	0.007258	0.018187
A11-OL	0.000733	0.000829	0.000842	0.000874	0.000764	0.000697	1.000963	0.000868	0.001040	0.000971	0.000923	0.001163	0.001100	0.001154	0.000956	0.001158	0.001240	0.000757
A12-OL	0.000357	0.000406	0.000408	0.000684	0.000558	0.000497	0.000486	1.000412	0.000627	0.001653	0.000395	0.000477	0.000468	0.000520	0.001287	0.000534	0.000500	0.000565
A1-OS	0.006464	0.009247	0.009078	0.008970	0.026333	0.006331	0.007213	0.008736	1.010882	0.014882	0.008443	0.010289	0.010328	0.010482	0.013422	0.010261	0.010634	0.027215
A2-OS	0.005573	0.006266	0.006300	0.006511	0.007192	0.005032	0.006591	0.006367	0.008112	0.007387	0.006207	0.007500	0.007331	0.007532	0.007216	0.007491	0.007863	0.007150
A5-OS	0.006724	0.001995	0.002057	0.002476	0.002068	0.002094	0.002750	0.002183	0.001996	0.002535	1.006884	0.001958	0.001965	0.001996	0.002358	0.001996	0.002024	0.002037
A6-OS	0.000088	0.000103	0.000103	0.000160	0.000135	0.000116	0.000117	0.000103	0.000156	0.000370	0.000104	1.000127	0.000124	0.000136	0.000293	0.000139	0.000134	0.000136
A7-OS	0.000113	0.000128	0.000129	0.000216	0.000176	0.000157	0.000153	0.000130	0.000198	0.000522	0.000125	0.000151	1.000148	0.000164	0.000406	0.000169	0.000158	0.000178
A8-OS	0.001082	0.000785	0.000793	0.001221	0.001010	0.000912	0.000955	0.000808	0.001119	0.002636	0.001170	0.000908	0.000892	1.000972	0.002094	0.000992	0.000950	0.001018
A10-OS	0.003423	0.004067	0.004026	0.018249	0.010436	0.003030	0.006398	0.003943	0.011865	0.006378	0.003678	0.004287	0.004335	0.006537	1.005762	0.006584	0.004413	0.011027
A11-OS	0.002243	0.002539	0.002579	0.002677	0.002340	0.002135	0.002950	0.002658	0.003185	0.002972	0.002826	0.003560	0.003367	0.003533	0.002927	1.003545	0.003796	0.002316
A12-OS	0.001539	0.001752	0.001761	0.002953	0.002410	0.002147	0.002096	0.001779	0.002705	0.007134	0.001705	0.002061	0.002021	0.002244	0.005555	0.002304	1.002157	0.002439
A14	0.056380	0.088241	0.085766	0.073597	0.085760	0.050804	0.057094	0.080750	0.092553	0.117836	0.077883	0.094360	0.096031	0.095363	0.110098	0.092697	0.096774	1.086108
A15	0.275171	0.317676	0.321137	0.353375	0.335844	0.436377	0.380175	0.328151	0.391693	0.413400	0.332787	0.413028	0.396554	0.415204	0.385396	0.464444	0.437117	0.329184
C-1	0.165338	0.257283	0.250350	0.215037	1.113837	0.149308	0.169550	0.236300	0.280675	0.361077	0.226430	0.275344	0.280009	0.278050	0.324292	0.270191	0.282507	0.778897
C-2	0.042529	0.048892	0.048903	0.101241	0.076927	0.068650	0.058784	0.048926	0.086607	0.245306	0.047077	0.056313	0.055602	0.064605	0.201156	0.064514	0.058724	0.078836

	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-JS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
C-3	0.166905	0.268577	0.260657	0.206122	0.236924	0.141874	0.165867	0.244608	0.271017	0.265385	0.236117	0.288137	0.293247	0.288796	0.277532	0.280178	0.295504	0.237332
C-4	0.015737	0.018123	0.018143	0.027303	0.024309	0.018448	0.019920	0.018184	0.027201	0.131337	0.017506	0.021024	0.020720	0.022513	0.070748	0.022392	0.021947	0.024577
C-5	0.025069	0.039354	0.038257	0.032413	0.138974	0.022352	0.025449	0.036036	0.043615	0.052001	0.034420	0.041803	0.042603	0.042191	0.047878	0.040947	0.042838	0.104827
C-6	0.004814	0.006674	0.006572	0.006069	0.007440	0.004279	0.005342	0.006366	0.006852	0.007292	0.005805	0.006939	0.007058	0.007016	0.007300	0.006817	0.007119	0.007428
C-7	0.020840	0.030851	0.030157	0.029535	0.030306	0.022363	0.022568	0.028751	0.032277	0.041843	0.025426	0.030503	0.031513	0.031364	0.045934	0.030300	0.031016	0.030885
C-8	0.021967	0.034057	0.033134	0.028972	0.040812	0.020040	0.022502	0.031265	0.043302	0.046832	0.030154	0.036552	0.037150	0.036988	0.043493	0.035981	0.037514	0.384424
C-9	0.001329	0.001142	0.001215	0.001566	0.001113	0.001332	0.001999	0.001363	0.001031	0.001070	0.000871	0.001051	0.001048	0.001061	0.001059	0.001041	0.001090	0.001087
C-10	0.023794	0.037952	0.036785	0.030408	0.039347	0.020434	0.023219	0.034421	0.039403	0.040831	0.033671	0.040525	0.041314	0.040868	0.041515	0.039727	0.041520	0.039446
C-11	0.001331	0.001561	0.001558	0.003050	0.002367	0.002499	0.001807	0.001553	0.002645	0.009252	0.001478	0.001768	0.001753	0.002009	0.008936	0.002001	0.001839	0.002421
C-12	0.111770	0.144040	0.143486	0.136088	0.141472	0.101987	0.134071	0.142363	0.165531	0.158592	0.141483	0.174592	0.171003	0.174457	0.159312	0.172339	0.182856	0.141102
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.108884	0.132147	0.132402	0.135092	0.147733	0.101421	0.133498	0.132920	0.150476	0.155246	0.128943	0.156659	0.153671	0.157490	0.152083	0.155931	0.163942	0.146992
C-15	0.036316	0.041044	0.041643	0.044162	0.041432	0.036857	0.047825	0.042859	0.049384	0.047951	0.043112	0.053621	0.051351	0.053514	0.046993	0.054143	0.056823	0.040949
C-16	0.005483	0.005017	0.005275	0.006535	0.005009	0.005434	0.008028	0.005797	0.003796	0.004283	0.003093	0.003573	0.003819	0.003669	0.004323	0.003485	0.003561	0.004899
C-17	0.023381	0.012233	0.011957	0.011448	0.031852	0.007953	0.008888	0.011398	0.059318	0.018470	0.013428	0.012317	0.012671	0.012610	0.016890	0.012205	0.012555	0.032029
C-18	0.019570	0.028319	0.027813	0.024358	0.027086	0.017730	0.021630	0.026786	0.026749	0.027418	0.022851	0.027472	0.028436	0.027733	0.028415	0.026828	0.027903	0.026868
C-19	0.066087	0.075201	0.075596	0.126768	0.103466	0.092177	0.089988	0.076397	0.116138	0.306296	0.073212	0.088470	0.086771	0.096355	0.238506	0.098896	0.092589	0.104729
C-20	0.025991	0.034595	0.034293	0.031860	0.034494	0.023374	0.030204	0.033681	0.048126	0.044233	0.042875	0.054133	0.050799	0.053668	0.043560	0.054018	0.057958	0.034309
C-21	0.103076	0.024185	0.025232	0.030571	0.024343	0.026987	0.036672	0.027353	0.020511	0.022887	0.102696	0.019951	0.020670	0.020355	0.022620	0.020206	0.020253	0.023835
C-22	0.078079	0.102314	0.101273	0.489804	0.264945	0.076337	0.166971	0.099164	0.288420	0.162083	0.091654	0.108783	0.109809	0.170038	0.146171	0.171620	0.112077	0.281024
C-23	0.194007	0.228883	0.230803	0.235017	0.227180	0.181011	0.247119	0.234693	0.268471	0.258364	0.234890	0.291454	0.281202	0.290826	0.256869	0.289245	0.307672	0.225120
C-24	0.035146	0.045541	0.045219	0.043930	0.052724	0.031801	0.040995	0.044568	0.064946	0.061828	0.057186	0.071669	0.067151	0.071271	0.059798	0.071826	0.076793	0.052374
C-25	0.071385	0.080825	0.082072	0.085198	0.074491	0.067950	0.093884	0.084599	0.101373	0.094600	0.089958	0.113297	0.107167	0.112453	0.093179	0.112831	0.120820	0.073718
C-26	0.010874	0.013107	0.013188	0.013157	0.011972	0.011155	0.013919	0.013354	0.015105	0.014376	0.013214	0.016444	0.015925	0.016399	0.014364	0.016577	0.017325	0.011907
C-27	0.046018	0.043252	0.045115	0.074427	0.055940	0.223565	0.092061	0.048890	0.058276	0.093209	0.040710	0.049904	0.048201	0.053107	0.068730	0.103373	0.052652	0.051690
Ld-BL	0.029345	0.040435	0.039684	0.040053	0.120319	0.028127	0.031571	0.038160	0.047779	0.068066	0.037868	0.044590	0.044854	0.045591	0.060861	0.044613	0.046030	0.119264
Ld-BS	0.052814	0.070996	0.069737	0.070212	0.205562	0.049549	0.056077	0.067188	0.083794	0.117773	0.067804	0.078663	0.079012	0.080327	0.105647	0.078652	0.081269	0.202397
Ld-CL	0.008605	0.011244	0.011020	0.011297	0.036918	0.007910	0.008659	0.010568	0.013313	0.020050	0.010950	0.012191	0.012316	0.012515	0.017692	0.012234	0.012554	0.036550
Ld-CS	0.018055	0.024182	0.023742	0.024053	0.072087	0.016944	0.019008	0.022851	0.028620	0.041021	0.023149	0.026682	0.026831	0.027285	0.036626	0.026708	0.027548	0.071949
Ld-TL	0.009930	0.013721	0.013451	0.013738	0.044128	0.009612	0.010581	0.012903	0.016279	0.024221	0.012828	0.015026	0.015146	0.015406	0.021444	0.015067	0.015493	0.041645
Ld-TS	0.027929	0.037614	0.036963	0.037611	0.108655	0.026519	0.029966	0.035645	0.044595	0.063356	0.035843	0.041807	0.041955	0.042731	0.056730	0.041861	0.043213	0.104919
Ld-HTL	0.001421	0.001936	0.001897	0.001945	0.006327	0.001359	0.001483	0.001818	0.002306	0.003477	0.001831	0.002111	0.002131	0.002167	0.003068	0.002119	0.002175	0.006226
Ld-HTS	0.005560	0.007680	0.007521	0.007391	0.023252	0.005166	0.005777	0.007198	0.009043	0.012566	0.007211	0.008362	0.008444	0.008539	0.011250	0.008340	0.008613	0.027999
Ld-LL	0.000225	0.000285	0.000279	0.000269	0.000891	0.000190	0.000215	0.000268	0.000329	0.000447	0.000287	0.000309	0.000312	0.000315	0.000402	0.000308	0.000319	0.000978
Ld-LS	0.001202	0.001533	0.001503	0.001464	0.004049	0.001027	0.001170	0.001442	0.001805	0.002376	0.001524	0.001659	0.001676	0.001691	0.002151	0.001652	0.001708	0.006416
Ld-OL	0.153030	0.005284	0.005175	0.005300	0.017385	0.004124	0.004014	0.004952	0.006306	0.009498	0.004882	0.005733	0.005794	0.005889	0.008371	0.005754	0.005903	0.018615
Ld-OS	0.003997	0.004584	0.004515	0.004539	0.012444	0.003251	0.003766	0.004377	0.046087	0.014536	0.151992	0.005066	0.005083	0.005162	0.007265	0.005060	0.005236	0.012844
Ld-LSD	0.002321	0.003338	0.003274	0.003280	0.009905	0.002304	0.002583	0.003145	0.011302	0.005603	0.003035	0.003694	0.003714	0.003774	0.005013	0.003693	0.003815	0.010152
Lb-BL	0.011132	0.012534	0.012559	0.019510	0.019435	0.011430	0.014076	0.012609	0.018260	0.026549	0.012446	0.014406	0.014218	0.015526	0.022597	0.015563	0.015027	0.019582
Lb-BS	0.057798	0.061972	0.062086	0.105913	0.099970	0.057762	0.071462	0.062317	0.095734	0.138453	0.064555	0.071503	0.070519	0.078484	0.116866	0.078936	0.074612	0.101288
Lb-CL	0.005142	0.005430	0.005470	0.008307	0.007420	0.005111	0.006384	0.005550	0.007771	0.011091	0.005720	0.006424	0.006287	0.006851	0.009505	0.006891	0.006730	0.007473
Lb-CS	0.023106	0.026196	0.026206	0.045533	0.045668	0.024021	0.029938	0.026226	0.040274	0.057389	0.026006	0.029923	0.029592	0.033039	0.048595	0.033188	0.031177	0.046524
Lb-TL	0.006428	0.007487	0.007459	0.011254	0.014653	0.006322	0.007855	0.007402	0.010527	0.014284	0.007535	0.008561	0.008482	0.009212	0.012400	0.009194	0.008911	0.014318

	A5-OL	A6-OL	A7-OL	A8-OL	A9-OL	A10-OL	A11-OL	A12-OL	A1-JS	A2-OS	A5-OS	A6-OS	A7-OS	A8-OS	A10-OS	A11-OS	A12-OS	A14
	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126
Lb-TS	0.046569	0.052925	0.052818	0.097212	0.096654	0.046315	0.060107	0.052602	0.082862	0.105464	0.053402	0.060227	0.059680	0.067455	0.090905	0.067669	0.062686	0.097466
Lb-HTL	0.000685	0.000779	0.000784	0.001214	0.001118	0.000711	0.000908	0.000793	0.001160	0.001537	0.000812	0.000978	0.000947	0.001042	0.001331	0.001049	0.001031	0.001125
Lb-HTS	0.026104	0.030037	0.030006	0.058926	0.051270	0.026846	0.035205	0.029943	0.048658	0.062219	0.029272	0.033677	0.033455	0.038344	0.053169	0.038519	0.035003	0.054802
Lb-LL	0.000236	0.000254	0.000256	0.000392	0.000371	0.000217	0.000298	0.000259	0.000366	0.000388	0.000263	0.000300	0.000294	0.000321	0.000353	0.000320	0.000315	0.000382
Lb-LS	0.009145	0.010353	0.010399	0.015780	0.014793	0.009192	0.011823	0.010492	0.014709	0.018912	0.010426	0.012239	0.011997	0.013075	0.016570	0.013107	0.012813	0.017044
Lb-OL	0.017041	0.073576	0.202208	0.018498	0.003358	0.022990	0.233733	0.318119	0.002546	0.002763	0.001899	0.002264	0.002243	0.002374	0.002579	0.002356	0.002357	0.002507
Lb-OS	0.006292	0.006579	0.006590	0.010726	0.010770	0.006136	0.007469	0.006611	0.137136	0.146124	0.125431	0.808570	0.674927	0.479784	0.193882	0.248010	0.984662	0.011057
Lb-HRD	0.360637	0.946198	0.888334	0.281124	0.219285	0.230659	0.168233	0.771084	0.213029	0.169825	0.223900	0.233546	0.433170	0.227397	0.407560	0.122731	0.128388	0.217305
K-BL	0.023900	0.027149	0.026909	0.039496	0.049365	0.019813	0.026616	0.026422	0.037750	0.037864	0.028102	0.030164	0.030142	0.032495	0.035262	0.032112	0.031251	0.049589
K-BS	0.044981	0.044323	0.044351	0.050126	0.068004	0.035399	0.045182	0.044407	0.057166	0.062047	0.050861	0.051532	0.050776	0.052643	0.057839	0.052234	0.053798	0.067542
K-CL	0.011681	0.011937	0.011906	0.012723	0.019884	0.009202	0.011585	0.011843	0.014281	0.016872	0.013937	0.014103	0.013874	0.014312	0.015672	0.014174	0.014736	0.019732
K-CS	0.011004	0.009969	0.009944	0.012474	0.019643	0.008108	0.010068	0.009893	0.012947	0.016416	0.012595	0.011360	0.011257	0.011833	0.014714	0.011745	0.011824	0.019659
K-TL	0.005522	0.005882	0.005843	0.007266	0.009700	0.004399	0.005655	0.005765	0.007279	0.008206	0.006488	0.006571	0.006551	0.006865	0.007638	0.006780	0.006817	0.009461
K-TS	0.019399	0.019595	0.019505	0.031493	0.036380	0.015565	0.020745	0.019321	0.028094	0.030939	0.022411	0.021999	0.021888	0.024048	0.028007	0.023926	0.022846	0.036160
K-HTL	0.001163	0.001130	0.001136	0.001345	0.001806	0.000918	0.001216	0.001147	0.001455	0.001524	0.001361	0.001391	0.001353	0.001422	0.001436	0.001416	0.001462	0.001791
K-HTS	0.009522	0.009843	0.009850	0.014485	0.012537	0.008209	0.010748	0.009866	0.013454	0.015272	0.010916	0.011387	0.011230	0.012148	0.013882	0.012146	0.011882	0.012873
K-LL	0.000401	0.000388	0.000392	0.000482	0.000465	0.000325	0.000441	0.000399	0.000523	0.000507	0.000465	0.000493	0.000475	0.000504	0.000482	0.000504	0.000520	0.000470
K-LS	0.003024	0.003015	0.003050	0.004132	0.003443	0.002719	0.003581	0.003121	0.004219	0.004967	0.003522	0.003885	0.003735	0.004024	0.004463	0.004048	0.004109	0.003468
K-OL	0.275126	0.079104	0.007592	0.465124	0.031109	0.467746	0.601228	0.007424	0.013862	0.011133	0.007724	0.008406	0.008434	0.010278	0.010226	0.010232	0.008690	0.016142
K-OS	0.006401	0.005275	0.005320	0.008042	0.007185	0.004481	0.006241	0.005410	0.045512	0.272923	0.348332	0.050820	0.006211	0.347952	0.169587	0.642457	0.006696	0.007280
B-L	0.070722	0.086630	0.085853	0.106718	0.196346	0.065492	0.080958	0.084279	0.112660	0.140701	0.085958	0.098616	0.098056	0.103021	0.126634	0.101779	0.102450	0.195577
B-S	0.212917	0.301870	0.294681	0.277044	0.413820	0.184654	0.214412	0.280114	0.278661	0.354100	0.223839	0.247013	0.267957	0.255988	0.343470	0.242199	0.243912	0.411002
C-L	0.029397	0.032926	0.032797	0.037349	0.072389	0.026147	0.031942	0.032536	0.044811	0.054134	0.035037	0.038205	0.037745	0.039197	0.048534	0.038806	0.039828	0.072010
C-S	0.096522	0.158937	0.153539	0.120484	0.166682	0.081091	0.090160	0.142602	0.111400	0.139778	0.090895	0.099904	0.118198	0.103494	0.147319	0.093001	0.093065	0.167011
T-L	0.024317	0.029115	0.028918	0.035145	0.070649	0.022783	0.027772	0.028520	0.036570	0.049108	0.029015	0.032861	0.032695	0.034179	0.043764	0.033767	0.034126	0.067540
T-S	0.201996	0.373444	0.357735	0.254955	0.309963	0.161701	0.173184	0.325903	0.223104	0.255204	0.180522	0.197601	0.250130	0.206136	0.294596	0.177283	0.174784	0.306038
HT-L	0.004353	0.004917	0.004927	0.005808	0.010402	0.004042	0.005124	0.004946	0.006326	0.007873	0.005236	0.006025	0.005873	0.006168	0.007119	0.006136	0.006327	0.010276
HT-S	0.092578	0.171655	0.164541	0.123160	0.119501	0.075287	0.082019	0.150124	0.103295	0.116594	0.080218	0.088573	0.113132	0.093392	0.134636	0.080195	0.077769	0.127729
Lo-L	0.001223	0.001194	0.001219	0.001567	0.002011	0.001102	0.001524	0.001270	0.001529	0.001644	0.001283	0.001436	0.001392	0.001474	0.001522	0.001470	0.001513	0.002106
Lo-S	0.055615	0.118895	0.113007	0.055745	0.048641	0.041357	0.040315	0.101074	0.046684	0.047505	0.042160	0.046172	0.066926	0.046518	0.069711	0.035372	0.036020	0.052982
O-L	0.447185	0.160238	0.217275	0.491412	0.055450	0.496775	0.841548	0.332851	0.027010	0.026527	0.017024	0.019544	0.019453	0.021682	0.024130	0.021489	0.020292	0.040885
O-S	0.050362	0.090576	0.086897	0.052608	0.052504	0.038309	0.041532	0.079443	0.669072	0.452612	0.647945	0.888832	0.724465	0.856819	0.406546	0.911990	1.013956	0.052963
COM	0.041850	0.046946	0.047675	0.050864	0.049149	0.039595	0.054863	0.049154	0.047940	0.048917	0.040396	0.048834	0.048844	0.049206	0.048806	0.048179	0.050569	0.048621
FA1	0.119422	0.087400	0.095939	0.140248	0.093321	0.122624	0.189050	0.113242	0.101140	0.098924	0.087318	0.108738	0.100911	0.108675	0.093169	0.110073	0.117065	0.090379
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.053629	0.039249	0.043084	0.062981	0.041908	0.055067	0.084897	0.050854	0.045419	0.044424	0.039212	0.048831	0.045316	0.048803	0.041839	0.049430	0.052570	0.040587
FA4	0.087935	0.094655	0.096667	0.105670	0.101122	0.083713	0.117106	0.100745	0.116412	0.113224	0.101793	0.126326	0.120172	0.125945	0.110306	0.126100	0.134328	0.100093
FA5	0.018519	0.022873	0.022883	0.022714	0.024623	0.017005	0.022571	0.022902	0.031955	0.029945	0.028276	0.035557	0.033283	0.035306	0.029130	0.035588	0.038118	0.024474
FA6	0.014027	0.019502	0.019165	0.017877	0.023831	0.012396	0.015216	0.018483	0.021841	0.023312	0.018527	0.022213	0.022177	0.022423	0.022888	0.021989	0.023026	0.023761
FA7	0.053629	0.039249	0.043084	0.062981	0.041908	0.055067	0.084897	0.050854	0.045419	0.044424	0.039212	0.048831	0.045316	0.048803	0.041839	0.049430	0.052570	0.040587
FA8	0.189174	0.173111	0.181999	0.225461	0.172833	0.187483	0.277001	0.200007	0.130966	0.147771	0.106726	0.123291	0.131749	0.126589	0.149170	0.120254	0.122878	0.169026
FA9	0.004032	0.004523	0.004593	0.004900	0.004735	0.003815	0.005286	0.004736	0.004619	0.004713	0.003892	0.004705	0.004706	0.004741	0.004702	0.004642	0.004872	0.004684



	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
A1-BL	0.015057	0.267282	0.275691	0.236562	0.258141	0.283251	0.291895	0.256239	0.281493	0.285978	0.228264	0.172572	0.185124	0.592401	0.146854	0.124099	0.144089	0.140679
A2-BL	0.005393	0.027037	0.027910	0.024327	0.026546	0.029289	0.030217	0.026356	0.029207	0.028890	0.023548	0.017802	0.019146	0.032040	0.169904	0.086756	0.088146	0.133223
A3-BL	0.001864	0.007421	0.007679	0.006628	0.007232	0.007422	0.007621	0.007176	0.007810	0.007722	0.006380	0.004824	0.005101	0.006264	0.007324	0.006571	0.007998	0.007665
A5-BL	0.001699	0.003117	0.003218	0.002806	0.003062	0.003216	0.003311	0.003039	0.003329	0.003338	0.002703	0.002043	0.002137	0.003263	0.004149	0.003482	0.004074	0.003985
A6-BL	0.000420	0.000608	0.000628	0.000548	0.000598	0.000647	0.000668	0.000593	0.000657	0.000653	0.000537	0.000406	0.000425	0.000670	0.001884	0.001649	0.001799	0.001670
A7-BL	0.000418	0.000594	0.000613	0.000535	0.000584	0.000633	0.000653	0.000580	0.000643	0.000638	0.000525	0.000397	0.000415	0.000656	0.001869	0.001637	0.001784	0.001655
A8-BL	0.001125	0.001813	0.001872	0.001633	0.001782	0.001909	0.001968	0.001769	0.001952	0.001944	0.001591	0.001203	0.001259	0.001962	0.004424	0.003840	0.004250	0.003989
A9-BL	0.015300	0.085687	0.088723	0.361160	0.394451	0.090683	0.093507	0.397174	0.092741	0.091093	0.074895	0.056622	0.061094	0.081624	0.123598	0.104160	0.121820	0.118150
A10-BL	0.002618	0.033717	0.034821	0.030284	0.033044	0.035936	0.037116	0.032818	0.036845	0.036497	0.030817	0.023298	0.023433	0.035172	0.020743	0.017443	0.034341	0.062506
A11-BL	0.000532	0.003254	0.003360	0.002922	0.003189	0.003362	0.003469	0.003166	0.003502	0.003514	0.002826	0.002136	0.002246	0.003196	0.003503	0.002950	0.003574	0.003522
A12-BL	0.004594	0.006535	0.006747	0.005888	0.006425	0.006960	0.007180	0.006379	0.007070	0.007017	0.005779	0.004369	0.004563	0.007215	0.020554	0.018002	0.019626	0.018208
A1-BS	0.024378	0.415829	0.432748	0.372894	0.406912	0.497009	0.509437	0.403914	0.435519	0.409893	0.357774	0.270483	0.335151	0.650295	0.234916	0.198356	0.230591	0.225260
A2-BS	0.018800	0.091349	0.094306	0.082218	0.089718	0.098853	0.101980	0.089074	0.098617	0.097578	0.079556	0.060146	0.064648	0.108216	0.590257	0.311966	0.318914	0.360320
A3-BS	0.000195	0.000777	0.000804	0.000694	0.000758	0.000778	0.000798	0.000752	0.000818	0.000809	0.000668	0.000505	0.000534	0.000656	0.000767	0.000688	0.000838	0.000803
A5-BS	0.004229	0.007763	0.008015	0.006989	0.007626	0.008010	0.008245	0.007569	0.008291	0.008312	0.006731	0.005089	0.005322	0.008127	0.010339	0.008678	0.010153	0.009929
A6-BS	0.001259	0.001824	0.001883	0.001643	0.001793	0.001941	0.002003	0.001780	0.001972	0.001958	0.001612	0.001219	0.001274	0.002011	0.005652	0.004948	0.005398	0.005011
A7-BS	0.001462	0.002079	0.002147	0.001873	0.002044	0.002214	0.002285	0.002030	0.002249	0.002233	0.001839	0.001390	0.001452	0.002296	0.006540	0.005728	0.006245	0.005794
A8-BS	0.004173	0.006459	0.006669	0.005818	0.006348	0.006820	0.007032	0.006302	0.006962	0.006928	0.005680	0.004294	0.004490	0.007023	0.016884	0.014695	0.016190	0.015145
A10-BS	0.004536	0.058492	0.060403	0.052526	0.057313	0.062403	0.064450	0.056921	0.063919	0.063305	0.053367	0.040347	0.040684	0.061247	0.036040	0.030315	0.115930	0.162414
A11-BS	0.001074	0.006566	0.006782	0.005898	0.006436	0.006786	0.007000	0.006389	0.007068	0.007092	0.005703	0.004312	0.004533	0.006450	0.007070	0.005954	0.007213	0.007109
A12-BS	0.016454	0.023408	0.024168	0.021089	0.023012	0.024928	0.025719	0.022848	0.025322	0.025135	0.020698	0.015648	0.016343	0.025843	0.073620	0.064479	0.070296	0.065218
A13-BS	0.001224	0.001888	0.001940	0.001699	0.001854	0.001927	0.001984	0.001841	0.002053	0.002033	0.001646	0.001244	0.001249	0.001640	0.001972	0.001745	0.002129	0.002032
A1-CL	0.004126	0.084951	0.084139	0.071375	0.077885	0.049719	0.049153	0.077296	0.085239	0.089168	0.068851	0.052052	0.029178	0.024847	0.042053	0.035640	0.041201	0.040144
A2-CL	0.001392	0.007785	0.008037	0.007005	0.007644	0.008462	0.008730	0.007589	0.008416	0.008317	0.006783	0.005128	0.005528	0.009317	0.051440	0.013482	0.025712	0.041486
A3-CL	0.000692	0.002757	0.002852	0.002462	0.002686	0.002757	0.002831	0.002666	0.002901	0.002868	0.002370	0.001792	0.001895	0.002327	0.002720	0.002441	0.002971	0.002847
A5-CL	0.001304	0.002383	0.002460	0.002145	0.002341	0.002459	0.002531	0.002323	0.002545	0.002551	0.002066	0.001562	0.001634	0.002496	0.003221	0.002707	0.003161	0.003087
A6-CL	0.000089	0.000132	0.000136	0.000119	0.000129	0.000140	0.000145	0.000128	0.000142	0.000141	0.000116	0.000088	0.000092	0.000145	0.000400	0.000350	0.000382	0.000355
A7-CL	0.000334	0.000475	0.000491	0.000428	0.000467	0.000506	0.000522	0.000464	0.000514	0.000510	0.000420	0.000318	0.000332	0.000525	0.001495	0.001309	0.001427	0.001324
A8-CL	0.000670	0.001090	0.001125	0.000981	0.001071	0.001148	0.001183	0.001063	0.001173	0.001168	0.000956	0.000723	0.000757	0.001179	0.002657	0.002306	0.002552	0.002396
A9-CL	0.007581	0.042475	0.043979	0.178054	0.194111	0.044972	0.046375	0.205734	0.045985	0.045170	0.037132	0.028072	0.030280	0.040502	0.061338	0.051657	0.060429	0.058639
A10-CL	0.000597	0.007722	0.007974	0.006934	0.007566	0.008240	0.008510	0.007514	0.008439	0.008357	0.007045	0.005326	0.005372	0.008089	0.004748	0.003995	0.011664	0.022310
A11-CL	0.000890	0.005442	0.005621	0.004888	0.005334	0.005624	0.005802	0.005295	0.005858	0.005878	0.004727	0.003574	0.003757	0.005346	0.005860	0.004935	0.005978	0.005892
A12-CL	0.001779	0.002531	0.002613	0.002280	0.002488	0.002695	0.002781	0.002470	0.002738	0.002718	0.002238	0.001692	0.001767	0.002794	0.007960	0.006972	0.007600	0.007052
A1-CS	0.009172	0.163057	0.169932	0.143897	0.157022	0.166302	0.179719	0.155872	0.174292	0.185011	0.139653	0.105580	0.112162	0.056328	0.089790	0.075885	0.088088	0.086003
A2-CS	0.005035	0.022475	0.023201	0.020228	0.022073	0.024233	0.024998	0.021914	0.024246	0.024017	0.019565	0.014791	0.015858	0.026333	0.135873	0.107824	0.125780	0.083735
A3-CS	0.000071	0.000283	0.000293	0.000252	0.000276	0.000283	0.000290	0.000273	0.000298	0.000294	0.000243	0.000184	0.000194	0.000239	0.000279	0.000250	0.000305	0.000292
A5-CS	0.001699	0.003117	0.003218	0.002806	0.003062	0.003216	0.003311	0.003039	0.003329	0.003338	0.002703	0.002043	0.002137	0.003263	0.004149	0.003482	0.004074	0.003985
A6-CS	0.000295	0.000437	0.000451	0.000393	0.000429	0.000465	0.000479	0.000426	0.000472	0.000469	0.000386	0.000292	0.000305	0.000481	0.001331	0.001165	0.001272	0.001181
A7-CS	0.000835	0.001188	0.001227	0.001071	0.001168	0.001265	0.001306	0.001160	0.001285	0.001276	0.001051	0.000794	0.000830	0.001312	0.003737	0.003273	0.003568	0.003311
A8-CS	0.001981	0.003139	0.003241	0.002827	0.003085	0.003319	0.003423	0.003063	0.003385	0.003366	0.002762	0.002088	0.002186	0.003417	0.008315	0.007240	0.007971	0.007452
A10-CS	0.001678	0.021610	0.022317	0.019408	0.021176	0.023043	0.023799	0.021032	0.023614	0.023390	0.019732	0.014918	0.015025	0.022588	0.013315	0.011198	0.037580	0.050651
A11-CS	0.000426	0.002603	0.002688	0.002338	0.002551	0.002690	0.002775	0.002533	0.002802	0.002811	0.002261	0.001709	0.001797	0.002557	0.002802	0.002360	0.002859	0.002818
A12-CS	0.006557	0.009328	0.009630	0.008403	0.009170	0.009933	0.010248	0.009105	0.010090	0.010016	0.008248	0.006236	0.006512	0.010298	0.029336	0.025693	0.028011	0.025988

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
A1-TL	0.005061	0.098788	0.101124	0.084049	0.091722	0.076706	0.079112	0.091000	0.088244	0.095328	0.077899	0.058893	0.047172	0.030709	0.051070	0.043240	0.050055	0.048811
A2-TL	0.000830	0.003143	0.003244	0.002828	0.003086	0.003360	0.003466	0.003063	0.003388	0.003364	0.002733	0.002066	0.002201	0.003571	0.014547	0.025901	0.038344	0.014226
A3-TL	0.000559	0.002226	0.002304	0.001988	0.002170	0.002227	0.002286	0.002153	0.002343	0.002317	0.001914	0.001447	0.001530	0.001879	0.002197	0.001971	0.002399	0.002299
A4-TL	0.000112	0.000445	0.000461	0.000398	0.000434	0.000445	0.000457	0.000431	0.000469	0.000463	0.000383	0.000289	0.000306	0.000376	0.000439	0.000394	0.000480	0.000460
A5-TL	0.000631	0.001162	0.001199	0.001046	0.001141	0.001198	0.001233	0.001133	0.001240	0.001244	0.001007	0.000761	0.000796	0.001215	0.001517	0.001272	0.001491	0.001461
A6-TL	0.000043	0.000066	0.000068	0.000060	0.000065	0.000070	0.000073	0.000065	0.000072	0.000071	0.000059	0.000044	0.000046	0.000073	0.000195	0.000170	0.000186	0.000173
A7-TL	0.000084	0.000119	0.000123	0.000107	0.000117	0.000127	0.000131	0.000116	0.000129	0.000128	0.000105	0.000079	0.000083	0.000131	0.000374	0.000327	0.000357	0.000331
A8-TL	0.000512	0.000851	0.000879	0.000767	0.000836	0.000899	0.000927	0.000830	0.000917	0.000912	0.000748	0.000566	0.000593	0.000924	0.002153	0.001871	0.002066	0.001936
A9-TL	0.007413	0.041482	0.042955	0.177155	0.193129	0.043855	0.045214	0.172222	0.044867	0.044065	0.036244	0.027401	0.029589	0.039417	0.059592	0.050304	0.058813	0.056975
A10-TL	0.000983	0.012643	0.013057	0.011356	0.012391	0.013470	0.013913	0.012307	0.013815	0.013686	0.011561	0.008740	0.008785	0.013174	0.007781	0.006542	0.012178	0.020009
A11-TL	0.000397	0.002425	0.002505	0.002178	0.002377	0.002507	0.002586	0.002360	0.002611	0.002620	0.002107	0.001593	0.001674	0.002382	0.002611	0.002199	0.002664	0.002626
A12-TL	0.001128	0.001604	0.001656	0.001445	0.001577	0.001708	0.001762	0.001566	0.001735	0.001722	0.001418	0.001072	0.001120	0.001771	0.005045	0.004419	0.004817	0.004469
A1-TS	0.014160	0.248890	0.263141	0.214825	0.234429	0.215455	0.213384	0.232636	0.239554	0.217860	0.202918	0.153410	0.203470	0.087380	0.138393	0.116906	0.135794	0.132654
A2-TS	0.006373	0.021692	0.022389	0.019521	0.021302	0.023119	0.023849	0.021147	0.023356	0.023211	0.018859	0.014258	0.015156	0.024468	0.100663	0.217817	0.145975	0.068536
A3-TS	0.000337	0.001343	0.001389	0.001199	0.001309	0.001343	0.001379	0.001299	0.001413	0.001397	0.001155	0.000873	0.000923	0.001134	0.001325	0.001189	0.001447	0.001387
A4-TS	0.001044	0.004156	0.004300	0.003711	0.004050	0.004156	0.004268	0.004019	0.004374	0.004325	0.003573	0.002701	0.002857	0.003508	0.004101	0.003680	0.004479	0.004292
A5-TS	0.002020	0.003732	0.003853	0.003360	0.003666	0.003851	0.003964	0.003639	0.003986	0.003996	0.003236	0.002446	0.002559	0.003906	0.004946	0.004150	0.004858	0.004753
A6-TS	0.001468	0.002121	0.002190	0.001911	0.002085	0.002258	0.002329	0.002070	0.002294	0.002277	0.001875	0.001417	0.001481	0.002339	0.006586	0.005766	0.006290	0.005839
A7-TS	0.001670	0.002376	0.002454	0.002141	0.002336	0.002531	0.002611	0.002320	0.002571	0.002552	0.002101	0.001589	0.001659	0.002624	0.007474	0.006546	0.007137	0.006621
A8-TS	0.004965	0.007843	0.008098	0.007063	0.007707	0.008293	0.008552	0.007652	0.008457	0.008410	0.006900	0.005216	0.005460	0.008538	0.020781	0.018094	0.019922	0.018624
A10-TS	0.004784	0.061417	0.063428	0.055163	0.060189	0.065456	0.067604	0.059779	0.067107	0.066477	0.056107	0.042418	0.042685	0.064100	0.037904	0.031869	0.121240	0.121586
A11-TS	0.001055	0.006448	0.006660	0.005791	0.006320	0.006664	0.006874	0.006274	0.006941	0.006965	0.005601	0.004234	0.004451	0.006333	0.006942	0.006847	0.007083	0.006981
A12-TS	0.006056	0.008615	0.008894	0.007761	0.008469	0.009174	0.009465	0.008409	0.009319	0.009250	0.007617	0.005759	0.006015	0.009511	0.027094	0.023730	0.025870	0.024002
A13-TS	0.004109	0.006338	0.006514	0.005706	0.006226	0.006471	0.006662	0.006182	0.006893	0.006827	0.005525	0.004177	0.004194	0.005506	0.006620	0.005859	0.007148	0.006821
A1-HTL	0.000725	0.013999	0.014793	0.012191	0.013303	0.012936	0.013910	0.013204	0.014270	0.010949	0.011696	0.008842	0.005702	0.004392	0.007372	0.006245	0.007224	0.007042
A2-HTL	0.000242	0.001018	0.001051	0.000917	0.001000	0.001095	0.001129	0.000993	0.001098	0.001089	0.000886	0.000670	0.000717	0.001183	0.005866	0.005877	0.008106	0.003481
A5-HTL	0.000138	0.000250	0.000258	0.000225	0.000246	0.000258	0.000266	0.000244	0.000267	0.000268	0.000217	0.000164	0.000171	0.000262	0.000335	0.000281	0.000329	0.000322
A6-HTL	0.000023	0.000043	0.000045	0.000039	0.000043	0.000046	0.000048	0.000042	0.000047	0.000047	0.000038	0.000029	0.000030	0.000047	0.000109	0.000094	0.000104	0.000098
A7-HTL	0.000013	0.000018	0.000018	0.000016	0.000018	0.000019	0.000020	0.000017	0.000019	0.000019	0.000016	0.000012	0.000012	0.000020	0.000056	0.000049	0.000054	0.000050
A8-HTL	0.000047	0.000094	0.000097	0.000084	0.000092	0.000099	0.000103	0.000092	0.000101	0.000100	0.000082	0.000062	0.000066	0.000102	0.000225	0.000195	0.000217	0.000204
A10-HTL	0.000097	0.001244	0.001284	0.001117	0.001219	0.001326	0.001369	0.001210	0.001359	0.001346	0.001135	0.000858	0.000865	0.001301	0.000771	0.000648	0.004260	0.003107
A11-HTL	0.000145	0.000887	0.000916	0.000797	0.000870	0.000917	0.000946	0.000863	0.000955	0.000958	0.000771	0.000583	0.000613	0.000872	0.000955	0.000805	0.000975	0.000961
A12-HTL	0.000155	0.000220	0.000227	0.000198	0.000216	0.000234	0.000242	0.000215	0.000238	0.000236	0.000194	0.000147	0.000153	0.000243	0.000691	0.000606	0.000660	0.000612
A1-HTS	0.003248	0.054030	0.052106	0.053579	0.058450	0.097533	0.103670	0.058132	0.096276	0.083795	0.060440	0.045694	0.028232	0.019843	0.030495	0.025755	0.029948	0.029222
A2-HTS	0.005058	0.018307	0.018896	0.016476	0.017979	0.019575	0.020193	0.017849	0.019721	0.019580	0.015922	0.012037	0.012826	0.020879	0.092981	0.158639	0.100340	0.057853
A4-HTS	0.000978	0.003894	0.004029	0.003478	0.003795	0.003895	0.003999	0.003766	0.004099	0.004052	0.003348	0.002531	0.002677	0.003287	0.003843	0.003448	0.004197	0.004022
A5-HTS	0.000515	0.000948	0.000979	0.000853	0.000931	0.000979	0.001007	0.000924	0.001013	0.001015	0.000822	0.000622	0.000650	0.000993	0.001283	0.001078	0.001259	0.001230
A6-HTS	0.000839	0.001216	0.001255	0.001095	0.001195	0.001294	0.001335	0.001187	0.001315	0.001305	0.001075	0.000812	0.000849	0.001341	0.003768	0.003298	0.003599	0.003341
A7-HTS	0.000501	0.000713	0.000736	0.000642	0.000701	0.000759	0.000783	0.000696	0.000771	0.000766	0.000630	0.000477	0.000498	0.000787	0.002242	0.001964	0.002141	0.001986
A8-HTS	0.003318	0.005110	0.005276	0.004602	0.005022	0.005412	0.005581	0.004986	0.005514	0.005481	0.004501	0.003403	0.003560	0.005581	0.014127	0.012320	0.013529	0.012623
A10-HTS	0.002444	0.031380	0.032408	0.028185	0.030754	0.033440	0.034538	0.030544	0.034287	0.033966	0.028673	0.021678	0.021808	0.032737	0.019361	0.016278	0.057516	0.058817
A11-HTS	0.000348	0.002130	0.002199	0.001913	0.002087	0.002201	0.002270	0.002072	0.002292	0.002300	0.001850	0.001398	0.001470	0.002092	0.002293	0.001931	0.002339	0.002306
A12-HTS	0.005304	0.007545	0.007790	0.006798	0.007418	0.008035	0.008290	0.007365	0.008162	0.008102	0.006672	0.005044	0.005268	0.008330	0.023730	0.020784	0.022659	0.021022

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
A13-HTS	0.001404	0.002166	0.002226	0.001950	0.002128	0.002211	0.002276	0.002112	0.002356	0.002333	0.001888	0.001427	0.001433	0.001881	0.002262	0.002002	0.002443	0.002331
A1-LL	0.000101	0.001850	0.001424	0.001732	0.001890	0.002621	0.002492	0.001878	0.002606	0.000657	0.001817	0.001374	0.000915	0.000609	0.000918	0.000775	0.000902	0.000880
A2-LL	0.000076	0.000317	0.000327	0.000285	0.000311	0.000340	0.000351	0.000309	0.000342	0.000339	0.000276	0.000209	0.000223	0.000366	0.001700	0.001935	0.003841	0.001289
A5-LL	0.000043	0.000079	0.000082	0.000072	0.000078	0.000082	0.000084	0.000077	0.000085	0.000085	0.000069	0.000052	0.000054	0.000083	0.000099	0.000083	0.000098	0.000096
A6-LL	0.000010	0.000026	0.000027	0.000023	0.000025	0.000027	0.000028	0.000025	0.000028	0.000027	0.000022	0.000017	0.000018	0.000027	0.000053	0.000045	0.000051	0.000048
A7-LL	0.000008	0.000012	0.000012	0.000011	0.000012	0.000013	0.000013	0.000012	0.000013	0.000013	0.000011	0.000008	0.000008	0.000013	0.000037	0.000033	0.000036	0.000033
A8-LL	0.000026	0.000064	0.000066	0.000058	0.000063	0.000068	0.000070	0.000063	0.000069	0.000068	0.000056	0.000042	0.000045	0.000069	0.000132	0.000113	0.000127	0.000121
A10-LL	0.000034	0.000424	0.000438	0.000380	0.000415	0.000452	0.000467	0.000412	0.000463	0.000458	0.000385	0.000291	0.000295	0.000445	0.000267	0.000225	0.003766	0.001441
A11-LL	0.000058	0.000355	0.000367	0.000319	0.000348	0.000367	0.000378	0.000345	0.000382	0.000383	0.000308	0.000233	0.000245	0.000349	0.000382	0.000322	0.000390	0.000384
A12-LL	0.000042	0.000059	0.000061	0.000054	0.000058	0.000063	0.000065	0.000058	0.000064	0.000064	0.000053	0.000040	0.000041	0.000066	0.000187	0.000164	0.000178	0.000166
A1-LS	0.000813	0.010340	0.011541	0.012765	0.013919	0.036102	0.041940	0.013887	0.035570	0.036679	0.017801	0.013458	0.006937	0.005067	0.007333	0.006180	0.007209	0.007043
A2-LS	0.001050	0.003653	0.003770	0.003286	0.003586	0.003894	0.004017	0.003560	0.003935	0.003910	0.003175	0.002401	0.002552	0.004111	0.015774	0.036271	0.031882	0.015717
A5-LS	0.000224	0.000409	0.000422	0.000368	0.000402	0.000422	0.000434	0.000399	0.000437	0.000438	0.000355	0.000268	0.000280	0.000428	0.000534	0.000447	0.000525	0.000514
A6-LS	0.000335	0.000482	0.000498	0.000434	0.000474	0.000513	0.000530	0.000471	0.000522	0.000518	0.000426	0.000322	0.000337	0.000532	0.001502	0.001316	0.001435	0.001332
A7-LS	0.000251	0.000356	0.000368	0.000321	0.000350	0.000380	0.000392	0.000348	0.000386	0.000383	0.000315	0.000238	0.000249	0.000394	0.001121	0.000982	0.001070	0.000993
A8-LS	0.001504	0.002174	0.002244	0.001958	0.002137	0.002312	0.002385	0.002121	0.002350	0.002333	0.001920	0.001452	0.001517	0.002394	0.006643	0.005813	0.006347	0.005896
A10-LS	0.000454	0.005837	0.006027	0.005242	0.005719	0.006223	0.006428	0.005680	0.006377	0.006317	0.005328	0.004028	0.004058	0.006102	0.003604	0.003030	0.013694	0.014111
A11-LS	0.000813	0.004969	0.005132	0.004463	0.004870	0.005135	0.005298	0.004835	0.005349	0.005367	0.004316	0.003263	0.003430	0.004881	0.005350	0.004506	0.005458	0.005380
A12-LS	0.000597	0.000850	0.000877	0.000765	0.000835	0.000905	0.000933	0.000829	0.000919	0.000912	0.000751	0.000568	0.000593	0.000938	0.002672	0.002340	0.002551	0.002367
A1-OL	0.001950	0.039493	0.039817	0.033724	0.036797	0.023578	0.022046	0.036543	0.048382	0.075141	0.034692	0.026228	0.012683	0.011769	0.019870	0.016841	0.019467	0.018967
A2-OL	0.000511	0.002544	0.002626	0.002290	0.002498	0.002755	0.002842	0.002481	0.002747	0.002718	0.002216	0.001675	0.001801	0.003017	0.016338	0.008060	0.009724	0.011050
A3-OL	0.000391	0.001555	0.001609	0.001389	0.001515	0.001555	0.001597	0.001504	0.001636	0.001618	0.001337	0.001011	0.001069	0.001313	0.001535	0.001377	0.001676	0.001606
A5-OL	0.000224	0.000409	0.000422	0.000368	0.000402	0.000422	0.000434	0.000399	0.000437	0.000438	0.000355	0.000268	0.000280	0.000428	0.000534	0.000447	0.000525	0.000514
A6-OL	0.000055	0.000084	0.000087	0.000076	0.000083	0.000089	0.000092	0.000082	0.000091	0.000090	0.000074	0.000056	0.000059	0.000092	0.000251	0.000219	0.000240	0.000223
A7-OL	0.000063	0.000089	0.000092	0.000080	0.000088	0.000095	0.000098	0.000087	0.000096	0.000096	0.000079	0.000060	0.000062	0.000098	0.000280	0.000245	0.000268	0.000248
A8-OL	0.000231	0.000392	0.000405	0.000353	0.000386	0.000405	0.000416	0.000383	0.000419	0.000421	0.000340	0.000257	0.000268	0.000412	0.000551	0.000465	0.000540	0.000526
A9-OL	0.009498	0.053176	0.055062	0.025017	0.024848	0.056257	0.058007	0.0237808	0.057541	0.056517	0.046473	0.035135	0.037919	0.050618	0.076689	0.064658	0.075599	0.073291
A10-OL	0.001368	0.017540	0.018116	0.015758	0.017194	0.018671	0.019285	0.017077	0.019165	0.018989	0.016058	0.012140	0.012179	0.018223	0.010805	0.009081	0.014084	0.015095
A11-OL	0.000126	0.000769	0.000794	0.000691	0.000754	0.000795	0.000820	0.000748	0.000828	0.000831	0.000668	0.000505	0.000531	0.000755	0.000828	0.000697	0.000845	0.000833
A12-OL	0.000397	0.000564	0.000583	0.000508	0.000555	0.000601	0.000620	0.000551	0.000611	0.000606	0.000499	0.000377	0.000394	0.000623	0.001775	0.001555	0.001695	0.001573
A1-OS	0.001593	0.026617	0.025886	0.024073	0.026268	0.031665	0.032561	0.026084	0.031628	0.035477	0.024029	0.018167	0.023724	0.009842	0.014914	0.012577	0.014651	0.014320
A2-OS	0.001746	0.007254	0.007488	0.006528	0.007124	0.007802	0.008048	0.007072	0.007824	0.007755	0.006313	0.004773	0.005107	0.008419	0.040794	0.044504	0.038242	0.028461
A5-OS	0.001141	0.002075	0.002142	0.001868	0.002039	0.002140	0.002203	0.002023	0.002216	0.002222	0.001799	0.001360	0.001422	0.002172	0.002762	0.002318	0.002712	0.002653
A6-OS	0.000086	0.000136	0.000140	0.000123	0.000134	0.000145	0.000149	0.000133	0.000147	0.000146	0.000120	0.000091	0.000095	0.000149	0.000393	0.000343	0.000376	0.000350
A7-OS	0.000125	0.000178	0.000184	0.000161	0.000175	0.000190	0.000196	0.000174	0.000193	0.000191	0.000158	0.000119	0.000124	0.000197	0.000561	0.000491	0.000535	0.000497
A8-OS	0.000669	0.001020	0.001053	0.000919	0.001003	0.001080	0.001114	0.000995	0.001101	0.001094	0.000898	0.000679	0.000710	0.001114	0.002823	0.002462	0.002704	0.002522
A10-OS	0.000827	0.010667	0.011016	0.009580	0.010453	0.011378	0.011752	0.010381	0.011657	0.011545	0.009736	0.007361	0.007419	0.011161	0.006570	0.005526	0.018705	0.027609
A11-OS	0.000385	0.002354	0.002432	0.002115	0.002308	0.002433	0.002510	0.002291	0.002534	0.002543	0.002045	0.001546	0.001625	0.002313	0.002535	0.002135	0.002586	0.002549
A12-OS	0.001712	0.002436	0.002515	0.002195	0.002395	0.002594	0.002676	0.002378	0.002635	0.002616	0.002154	0.001628	0.001701	0.002689	0.007661	0.006710	0.007315	0.006787
A14	0.016148	0.087101	0.090101	0.244386	0.265381	0.092299	0.095223	0.271527	0.094081	0.092530	0.958978	0.725005	0.061630	0.085421	0.117302	0.098311	0.116104	0.113499
A15	1.048612	0.334728	0.345550	0.304180	0.331933	0.347125	0.357733	0.329489	0.358619	0.358285	0.290653	0.219739	0.230612	0.354821	0.393491	0.336219	0.397104	0.392663
C-1	0.043722	1.253629	0.262538	0.954864	1.042386	0.267598	0.275882	1.031683	0.274008	0.269529	0.687727	0.519934	0.180158	0.242752	0.347511	0.292661	0.342790	0.332929
C-2	0.012063	0.078098	1.080637	0.070214	0.076616	0.083743	0.086439	0.076078	0.084789	0.083986	0.069608	0.052625	0.054703	0.086600	0.260880	0.224385	0.252180	0.245965

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
C-3	0.043107	0.240701	0.249458	1.215308	0.234945	0.252159	0.259679	0.233235	0.259109	0.254020	0.209552	0.158425	0.172505	0.219945	0.257795	0.226224	0.274931	0.266004
C-4	0.004564	0.024617	0.025418	0.022136	1.024154	0.026399	0.027237	0.023982	0.026629	0.026371	0.021700	0.016406	0.017288	0.027706	0.107645	0.086189	0.090246	0.085117
C-5	0.006566	0.038999	0.040352	0.121847	0.133006	0.041759	0.034123	0.132115	0.042543	0.041749	0.092557	0.069975	0.027748	0.037471	0.050965	0.043059	0.050668	0.049228
C-6	0.001103	0.007539	0.007792	0.006790	0.007410	0.008086	1.008354	0.007356	0.008111	0.008034	0.006558	0.004958	0.005299	0.008896	0.008668	0.006904	0.008286	0.008387
C-7	0.005170	0.030542	0.031490	0.027648	0.030169	0.034313	0.035666	1.029956	0.034347	0.033961	0.027270	0.020617	0.021236	0.033347	0.053653	0.041567	0.049685	0.051157
C-8	0.006202	0.041501	0.042893	0.094260	0.102412	0.044486	0.045978	0.104441	1.045490	0.044879	0.339427	0.256613	0.029080	0.040763	0.046673	0.039161	0.046142	0.045098
C-9	0.000154	0.001108	0.001143	0.000999	0.001090	0.001138	0.001173	0.001082	0.001188	1.001209	0.000960	0.000725	0.000747	0.001201	0.001187	0.000957	0.001152	0.001164
C-10	0.007858	0.040014	0.041339	0.035916	0.039192	0.042457	0.043833	0.038904	0.043084	0.042439	1.034829	0.026331	0.028019	0.040625	0.045101	0.037678	0.045260	0.044685
C-11	0.000380	0.002404	0.002482	0.002160	0.002357	0.002568	0.002650	0.002341	0.002605	0.002580	0.002138	1.001616	0.001682	0.002630	0.007782	0.006188	0.007316	0.007369
C-12	0.021961	0.142751	0.147527	0.128299	0.140002	0.152320	0.157354	0.138994	0.154822	0.153658	1.124586	0.094189	1.100423	0.149665	0.158990	0.131094	0.157855	0.156804
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.027540	0.148908	0.153781	0.134164	0.146402	0.161819	0.166926	0.145358	0.160639	0.158765	1.029786	0.098121	0.105856	0.180400	1.183230	0.141139	0.168455	0.172599
C-15	0.020647	0.041722	0.043045	0.037543	0.040968	0.043117	0.044480	0.040665	0.044693	0.044795	0.036156	0.027335	0.028400	0.042259	1.037811	0.045574	1.037811	0.045157
C-16	0.000702	0.005013	0.005175	0.004509	0.004920	0.005107	0.005251	0.004883	0.005330	0.005379	0.004326	0.003270	0.003394	0.005210	0.005317	0.004346	1.005241	0.005246
C-17	0.002103	0.032466	0.033446	0.028971	0.031613	0.035934	0.037106	0.031384	0.035643	0.035012	0.028280	0.021380	0.023220	0.037958	0.018695	0.016011	0.018745	1.018208
C-18	0.006932	0.027594	0.028550	0.024642	0.026890	0.027596	0.028335	0.026682	0.029040	0.028713	0.023723	0.017935	0.018967	0.023292	0.027231	0.024431	0.029738	0.028498
C-19	0.073510	0.104577	0.107970	0.094215	0.102807	0.111365	0.114901	0.102076	0.113127	0.112289	0.092470	0.069909	0.073013	0.115452	0.328897	0.288061	0.314047	0.291364
C-20	0.005267	0.034926	0.036088	0.031337	0.034195	0.036616	0.037725	0.033946	0.037380	0.037060	0.030293	0.022902	0.024578	0.036400	0.038898	0.032030	0.038686	0.038484
C-21	0.015048	0.024354	0.025138	0.021939	0.023941	0.024895	0.025610	0.023761	0.025943	0.026121	0.021045	0.015910	0.016535	0.025296	0.026604	0.021986	0.026377	0.026278
C-22	0.021149	0.270904	0.279806	0.243388	0.265566	0.288283	0.297754	0.263761	0.295991	0.293291	0.248130	0.187591	0.188055	0.281133	0.166854	0.140219	0.163344	0.159980
C-23	0.033660	0.229323	0.236821	0.206038	0.224833	0.237647	0.244898	0.223197	0.245685	0.245234	0.198770	0.150274	0.158431	0.238863	0.247367	0.204669	0.247491	0.246335
C-24	0.007465	0.035590	0.055283	0.048181	0.052576	0.055322	0.057042	0.052197	0.056947	0.056938	0.046243	0.034961	0.036655	0.060605	0.058136	0.046554	0.055948	0.056851
C-25	0.012261	0.074940	0.077398	0.067307	0.073447	0.077445	0.079892	0.072915	0.080663	0.080942	0.065089	0.049209	0.051731	0.073607	0.080683	0.067956	0.082318	0.081130
C-26	0.007819	0.012061	0.012395	0.010858	0.011848	0.012313	0.012676	0.011763	0.013117	0.012990	0.010513	0.007948	0.007980	0.010476	0.012598	0.011148	0.013602	0.012980
C-27	0.007487	0.051815	0.053447	0.049961	0.054523	0.054155	0.055793	0.054095	0.055987	0.056112	0.045640	0.034504	0.035527	0.055353	0.087987	0.084996	0.093664	0.089477
Ld-BL	0.007290	0.123287	0.127168	0.109130	0.119085	0.130612	0.134595	0.118208	0.129854	0.131898	0.105304	0.079612	0.085386	0.271858	0.068643	0.057918	0.067285	0.065841
Ld-BS	0.012820	0.207689	0.216128	0.186249	0.203241	0.247999	0.254207	0.201743	0.217555	0.204848	0.178706	0.135105	0.167219	0.324033	0.118649	0.100072	0.116427	0.113827
Ld-CL	0.002167	0.039775	0.039422	0.033455	0.036507	0.023559	0.023317	0.036231	0.039948	0.041756	0.032272	0.024398	0.013882	0.012072	0.020282	0.017096	0.019823	0.019377
Ld-CS	0.004418	0.074166	0.077288	0.065461	0.071432	0.075649	0.081724	0.070908	0.079276	0.084117	0.063527	0.048028	0.051016	0.025997	0.041318	0.034912	0.040550	0.039573
Ld-TL	0.002510	0.046595	0.047700	0.039660	0.043280	0.036269	0.037406	0.042940	0.041684	0.044997	0.036770	0.027799	0.022326	0.014724	0.024337	0.020633	0.023913	0.023285
Ld-TS	0.006787	0.113570	0.120053	0.098056	0.107004	0.098451	0.097539	0.106186	0.109398	0.099569	0.092638	0.070036	0.092738	0.040430	0.063879	0.054292	0.062909	0.061273
Ld-HTL	0.000360	0.006578	0.006950	0.005730	0.006253	0.006084	0.006540	0.006206	0.006708	0.005157	0.005497	0.004156	0.002691	0.002095	0.003521	0.002987	0.003462	0.003353
Ld-HTS	0.001398	0.022135	0.021358	0.021936	0.023930	0.039835	0.042336	0.023800	0.039329	0.034252	0.024722	0.018690	0.011593	0.008239	0.012649	0.010729	0.012446	0.012122
Ld-LL	0.000054	0.000881	0.000681	0.000824	0.000899	0.001243	0.001183	0.000893	0.001237	0.000321	0.000864	0.000653	0.000438	0.000299	0.000446	0.000376	0.000439	0.000428
Ld-LS	0.000292	0.003327	0.003707	0.004083	0.004452	0.011436	0.013275	0.004441	0.011271	0.011620	0.005665	0.004283	0.002233	0.001672	0.002415	0.002068	0.002411	0.002334
Ld-OL	0.000979	0.018713	0.018872	0.015989	0.017445	0.011262	0.010550	0.017325	0.022892	0.035431	0.016436	0.012426	0.006086	0.005720	0.009813	0.008202	0.009497	0.009285
Ld-OS	0.000912	0.012575	0.012252	0.011372	0.012409	0.014905	0.015328	0.012322	0.014900	0.016666	0.011340	0.008574	0.011134	0.004903	0.007549	0.006438	0.007411	0.007186
Ld-LSD	0.000582	0.010049	0.010397	0.009040	0.009865	0.011615	0.012104	0.009795	0.011650	0.011085	0.008963	0.006776	0.007416	0.006544	0.005624	0.004750	0.005519	0.005390
Lb-BL	0.005573	0.019732	0.020369	0.018816	0.020533	0.020941	0.021600	0.020408	0.021201	0.021170	0.017290	0.013071	0.013734	0.026973	0.044167	0.031215	0.035215	0.041759
Lb-BS	0.030593	0.101199	0.104679	0.091035	0.099336	0.110771	0.114108	0.098629	0.108751	0.106677	0.089432	0.067612	0.073143	0.121551	0.230168	0.165004	0.209152	0.226968
Lb-CL	0.002515	0.007563	0.007769	0.006934	0.007566	0.007524	0.007738	0.007529	0.008095	0.008105	0.006598	0.004988	0.004914	0.007302	0.014527	0.010346	0.013517	0.015802
Lb-CS	0.012551	0.046514	0.048175	0.041627	0.045423	0.048729	0.051049	0.045100	0.050155	0.050934	0.041078	0.031056	0.032248	0.038932	0.081956	0.068842	0.089512	0.084757
Lb-TL	0.002857	0.015186	0.015608	0.014272	0.015573	0.013693	0.014125	0.015314	0.014853	0.015405	0.012642	0.009558	0.008741	0.009767	0.016506	0.016396	0.020881	0.017542

	A15	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17
	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
Lb-TS	0.023431	0.099197	0.103359	0.087924	0.095942	0.097598	0.099350	0.095249	0.102902	0.099157	0.086058	0.065061	0.073493	0.077819	0.124531	0.133318	0.166928	0.147283
Lb-HTL	0.000314	0.001137	0.001180	0.001016	0.001109	0.001170	0.001216	0.001101	0.001216	0.001157	0.000994	0.000751	0.000725	0.001030	0.002029	0.001831	0.002819	0.002090
Lb-HTS	0.014218	0.051325	0.052262	0.047180	0.051479	0.062371	0.064961	0.051136	0.063124	0.060306	0.048388	0.036582	0.033792	0.046928	0.085005	0.094532	0.106171	0.092662
Lb-LL	0.000069	0.000373	0.000365	0.000338	0.000369	0.000421	0.000425	0.000367	0.000428	0.000346	0.000337	0.000255	0.000243	0.000338	0.000568	0.000545	0.001567	0.000744
Lb-LS	0.004094	0.014301	0.015002	0.013814	0.015071	0.021897	0.023868	0.014982	0.022086	0.022340	0.015049	0.011377	0.009846	0.013431	0.021507	0.022732	0.029042	0.025444
Lb-OL	0.000566	0.002527	0.002606	0.002419	0.002641	0.002583	0.002657	0.002616	0.002738	0.002819	0.002213	0.001673	0.001694	0.002560	0.004291	0.003023	0.003645	0.003747
Lb-OS	0.003363	0.010898	0.011049	0.009830	0.010727	0.011989	0.012357	0.010651	0.012152	0.012591	0.009763	0.007381	0.008245	0.009352	0.019669	0.018201	0.021081	0.020704
Lb-HRD	0.048937	0.221721	0.228747	0.197922	0.215976	0.226647	0.233544	0.214425	0.234483	0.237905	0.191869	0.145057	0.149598	0.253276	0.172931	0.147600	0.201000	0.215472
K-BL	0.006239	0.050354	0.051981	0.049141	0.053628	0.053183	0.054820	0.053322	0.053687	0.053841	0.043784	0.033102	0.034985	0.080857	0.072004	0.047513	0.056322	0.074079
K-BS	0.012265	0.068667	0.071110	0.061708	0.067337	0.076897	0.079113	0.066849	0.073262	0.071238	0.059636	0.045086	0.051000	0.089778	0.235008	0.134151	0.143960	0.159291
K-CL	0.002748	0.020849	0.021028	0.020067	0.021895	0.016193	0.016392	0.021922	0.021529	0.022049	0.017423	0.013172	0.010255	0.012275	0.020574	0.014585	0.018453	0.020109
K-CS	0.003060	0.020078	0.020854	0.017844	0.019471	0.020771	0.022063	0.019330	0.021533	0.022323	0.017358	0.013123	0.013881	0.012421	0.030688	0.025157	0.030522	0.025616
K-TL	0.001480	0.010036	0.010323	0.009693	0.010576	0.009093	0.009371	0.010367	0.009865	0.010187	0.008354	0.006316	0.005877	0.006444	0.009337	0.009474	0.012345	0.010109
K-TS	0.006263	0.037473	0.039151	0.033007	0.036017	0.035867	0.036329	0.035751	0.038295	0.036532	0.031927	0.024137	0.028239	0.025610	0.036110	0.039203	0.049677	0.043922
K-HTL	0.000254	0.001848	0.001930	0.001637	0.001786	0.001830	0.001924	0.001773	0.001940	0.001726	0.001582	0.001196	0.001028	0.001290	0.002981	0.002808	0.004012	0.002425
K-HTS	0.003879	0.012640	0.012983	0.011446	0.012489	0.013939	0.014424	0.012401	0.014316	0.014000	0.011366	0.008593	0.008558	0.012037	0.021443	0.025098	0.025529	0.021515
K-LL	0.000096	0.000468	0.000470	0.000423	0.000461	0.000511	0.000522	0.000458	0.000521	0.000467	0.000415	0.000314	0.000316	0.000462	0.001129	0.001188	0.002577	0.001078
K-LS	0.001011	0.003472	0.003586	0.003127	0.003412	0.003687	0.003811	0.003388	0.003788	0.003781	0.003062	0.002315	0.002409	0.003614	0.006989	0.010043	0.010629	0.007619
K-OL	0.001638	0.015926	0.016343	0.016893	0.018453	0.014780	0.014995	0.018210	0.017913	0.020814	0.014253	0.010775	0.009406	0.013042	0.013564	0.010472	0.013941	0.014488
K-OS	0.001530	0.007265	0.007441	0.006537	0.007133	0.007812	0.008055	0.007082	0.007960	0.008075	0.006427	0.004859	0.005251	0.007063	0.016044	0.016232	0.017304	0.016036
B-L	0.020085	0.200646	0.207018	0.183640	0.200396	0.212341	0.218855	0.199036	0.212558	0.214730	0.172684	0.130552	0.139088	0.387863	0.192680	0.142881	0.166307	0.189292
B-S	0.063344	0.418134	0.433771	0.375348	0.409587	0.477387	0.490412	0.406607	0.442697	0.426401	0.362894	0.274355	0.318810	0.581782	0.619812	0.428823	0.507853	0.540466
C-L	0.008114	0.076439	0.076747	0.067885	0.074074	0.056496	0.057021	0.073731	0.078901	0.080944	0.063582	0.048069	0.034983	0.038376	0.061443	0.046968	0.057622	0.061109
C-S	0.025780	0.170235	0.176719	0.151327	0.165128	0.175357	0.185953	0.163933	0.182235	0.189092	0.147462	0.111484	0.117025	0.111257	0.179382	0.149882	0.188028	0.179049
T-L	0.007137	0.073980	0.075860	0.065576	0.071559	0.061283	0.063195	0.070735	0.068710	0.072926	0.059634	0.045085	0.038402	0.033491	0.052574	0.048360	0.059366	0.053226
T-S	0.050834	0.319119	0.333615	0.280565	0.306160	0.302403	0.305836	0.303898	0.323543	0.309267	0.270216	0.204288	0.240930	0.222841	0.281008	0.274198	0.342786	0.319951
HT-L	0.001088	0.010720	0.011252	0.009424	0.010284	0.010284	0.010916	0.010208	0.011101	0.009283	0.009073	0.006860	0.005231	0.005750	0.009814	0.008638	0.011508	0.009107
HT-S	0.026297	0.118821	0.120353	0.109818	0.119824	0.149606	0.156191	0.119032	0.151407	0.143714	0.112778	0.085262	0.076000	0.104837	0.146135	0.152996	0.174323	0.158469
Lo-L	0.000256	0.002005	0.001808	0.001840	0.002008	0.002464	0.002427	0.001994	0.002487	0.001442	0.001859	0.001406	0.001186	0.001439	0.002456	0.002349	0.004869	0.002547
Lo-S	0.011007	0.047695	0.049729	0.044793	0.048873	0.064206	0.068961	0.048563	0.065289	0.066309	0.046781	0.035367	0.032414	0.049264	0.052570	0.053057	0.066489	0.061457
O-L	0.003543	0.040803	0.041576	0.038574	0.042112	0.032622	0.032345	0.041697	0.047600	0.063020	0.036099	0.027292	0.019772	0.024578	0.030696	0.024153	0.030000	0.030445
O-S	0.010154	0.052982	0.053682	0.047660	0.052006	0.057468	0.059181	0.051636	0.058584	0.061261	0.046764	0.035354	0.039614	0.047062	0.062642	0.056829	0.066657	0.066045
COM	0.007048	0.049610	0.051213	0.044582	0.048649	0.051192	0.052774	0.048291	0.053036	0.053016	0.042930	0.032456	0.033863	0.051413	0.052960	0.043422	0.052434	0.052324
FA1	0.011974	0.092543	0.095345	0.083593	0.091222	0.094680	0.097332	0.090553	0.098495	0.100382	0.079800	0.060330	0.061860	0.111552	0.102153	0.078092	0.093477	0.096957
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.005377	0.041558	0.042816	0.037539	0.040965	0.042518	0.043709	0.040665	0.044231	0.045078	0.035836	0.027093	0.027780	0.050095	0.045874	0.035069	0.041978	0.043541
FA4	0.014379	0.101824	0.105006	0.091776	0.100149	0.106614	0.110100	0.099433	0.109600	0.109998	0.088377	0.066814	0.069117	0.115558	0.114976	0.090208	0.108563	0.110596
FA5	0.003582	0.024917	0.025699	0.022427	0.024473	0.026084	0.026898	0.024298	0.026732	0.026648	0.021609	0.016337	0.017147	0.028062	0.027727	0.022250	0.026777	0.027063
FA6	0.003415	0.024177	0.025000	0.021795	0.023783	0.026067	0.026887	0.023614	0.025873	0.025604	0.020980	0.015861	0.017223	0.031589	0.028722	0.021863	0.026133	0.027168
FA7	0.005377	0.041558	0.042816	0.037539	0.040965	0.042518	0.043709	0.040665	0.044231	0.045078	0.035836	0.027093	0.027780	0.050095	0.045874	0.035069	0.041978	0.043541
FA8	0.024222	0.172958	0.178543	0.155622	0.169755	0.176195	0.181187	0.168472	0.183884	0.185587	0.149242	0.112829	0.117115	0.179770	0.183439	0.149950	0.180839	0.181010
FA9	0.000679	0.004780	0.004934	0.004295	0.004687	0.004932	0.005084	0.004652	0.005110	0.005108	0.004136	0.003127	0.003262	0.004953	0.005102	0.004183	0.005052	0.005041



	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-BS	Ld-CL	Ld-CS	Ld-TL	Ld-TS	Ld-HTL	Ld-HTS
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
A1-BL	0.094111	0.103876	0.018811	0.075245	0.114918	0.015057	0.015057	0.048021	0.075167	0.015057	0.072607	0.100426	0.064922	0.105969	0.074529	0.120900	0.069366	0.125312
A2-BL	0.023036	0.030652	0.005443	0.022959	0.024030	0.005393	0.005393	0.013281	0.017597	0.005393	0.029549	0.040860	0.024634	0.030230	0.018880	0.022889	0.026160	0.032885
A3-BL	0.277247	0.008681	0.001661	0.006436	0.007481	0.001864	0.001864	0.004296	0.006224	0.001864	0.005953	0.006161	0.006477	0.006964	0.017348	0.014233	0.006704	0.010395
A5-BL	0.003164	0.007047	0.017101	0.097150	0.003402	0.001699	0.001699	0.001725	0.006739	0.001699	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729	0.002589	0.003688
A6-BL	0.000468	0.006255	0.000502	0.000437	0.001181	0.000420	0.000420	0.000291	0.000343	0.000420	0.000546	0.000656	0.000492	0.000567	0.000456	0.000510	0.000508	0.000600
A7-BL	0.000454	0.006238	0.000104	0.000425	0.001168	0.000418	0.000418	0.000283	0.000333	0.000418	0.000532	0.000638	0.000478	0.000550	0.000441	0.000492	0.000492	0.000583
A8-BL	0.001554	0.013225	0.006389	0.019274	0.002946	0.001125	0.001125	0.000919	0.001976	0.001125	0.001802	0.002018	0.001656	0.001810	0.001794	0.001770	0.001534	0.001922
A9-BL	0.106603	0.106553	0.019304	0.076274	0.097659	0.015300	0.015300	0.049048	0.071064	0.015300	0.064079	0.094391	0.058398	0.103110	0.074805	0.142677	0.063000	0.130171
A10-BL	0.014785	0.017539	0.003739	0.014066	0.135502	0.002618	0.002618	0.011757	0.010836	0.002618	0.012634	0.015271	0.011162	0.015632	0.013030	0.017853	0.012045	0.017692
A11-BL	0.003198	0.003869	0.000719	0.002942	0.003217	0.000532	0.000532	0.045345	0.002255	0.000532	0.003457	0.003439	0.003992	0.004709	0.003179	0.004335	0.003820	0.003819
A12-BL	0.004999	0.068618	0.001142	0.004671	0.012844	0.004594	0.004594	0.003116	0.003662	0.004594	0.005847	0.007020	0.005262	0.006049	0.004852	0.005414	0.005417	0.006410
A1-BS	0.152137	0.169314	0.030634	0.122661	0.184538	0.024378	0.024378	0.078194	0.124656	0.024378	0.119212	0.164282	0.106543	0.173842	0.120793	0.195349	0.114280	0.204151
A2-BS	0.079246	0.105861	0.018738	0.079015	0.082607	0.018800	0.018800	0.045869	0.060510	0.018800	0.102526	0.141572	0.085564	0.104562	0.065282	0.078171	0.090881	0.113561
A3-BS	0.029045	0.000909	0.000174	0.000674	0.000784	0.000195	0.000195	0.000450	0.000652	0.000195	0.000624	0.000645	0.000679	0.000730	0.001817	0.001491	0.000702	0.001089
A5-BS	0.007877	0.017583	0.042737	0.241574	0.008476	0.004229	0.004229	0.004295	0.016765	0.004229	0.009066	0.009021	0.008612	0.008500	0.011229	0.009287	0.006450	0.009183
A6-BS	0.001403	0.018764	0.001505	0.001312	0.003543	0.001259	0.001259	0.000873	0.001028	0.001259	0.001639	0.001967	0.001475	0.001701	0.001367	0.001531	0.001524	0.001799
A7-BS	0.001590	0.021833	0.000363	0.001486	0.004087	0.001462	0.001462	0.000991	0.001165	0.001462	0.001861	0.002234	0.001674	0.001925	0.001544	0.001723	0.001724	0.002040
A8-BS	0.005398	0.052225	0.015370	0.055963	0.011039	0.004173	0.004173	0.003225	0.006346	0.004173	0.006274	0.007121	0.005743	0.006322	0.006042	0.006063	0.005411	0.006721
A10-BS	0.025861	0.030466	0.006492	0.024531	0.227677	0.004536	0.004536	0.020189	0.018926	0.004536	0.022013	0.026588	0.019475	0.027200	0.023002	0.031378	0.020830	0.030818
A11-BS	0.006455	0.007808	0.001452	0.005937	0.006493	0.001074	0.001074	0.091515	0.004552	0.001074	0.006976	0.006941	0.008056	0.009504	0.006416	0.008748	0.007709	0.007707
A12-BS	0.017904	0.245776	0.004092	0.016732	0.046005	0.016454	0.016454	0.011159	0.013117	0.016454	0.020945	0.025145	0.018847	0.021666	0.017381	0.019393	0.019404	0.022960
A13-BS	0.002099	0.002253	0.000438	0.001717	0.001936	0.001224	0.001224	0.158037	0.001224	0.001510	0.001682	0.003760	0.001844	0.002747	0.002643	0.003471	0.003324	0.003324
A1-CL	0.025941	0.027756	0.005043	0.020096	0.032458	0.004126	0.004126	0.012883	0.018799	0.004126	0.018817	0.026447	0.016891	0.027614	0.020292	0.033409	0.017770	0.033535
A2-CL	0.006529	0.008779	0.001555	0.006572	0.006859	0.001392	0.001392	0.003763	0.005040	0.001392	0.008458	0.011913	0.006885	0.008574	0.004986	0.006428	0.007238	0.009398
A3-CL	0.102977	0.003224	0.000617	0.002391	0.002779	0.000692	0.000692	0.001595	0.002312	0.000692	0.002211	0.002288	0.002406	0.002587	0.006443	0.005286	0.002490	0.003861
A5-CL	0.002411	0.005615	0.012838	0.073535	0.002624	0.001304	0.001304	0.001316	0.005113	0.001304	0.002776	0.002766	0.002636	0.002603	0.003430	0.002840	0.001978	0.002813
A6-CL	0.000102	0.001318	0.000221	0.000095	0.000252	0.000089	0.000089	0.000063	0.000075	0.000089	0.000119	0.000143	0.000107	0.000124	0.000100	0.000112	0.000111	0.000131
A7-CL	0.000364	0.004990	0.000083	0.000340	0.000934	0.000334	0.000334	0.000227	0.000266	0.000334	0.000425	0.000511	0.000383	0.000440	0.000353	0.000394	0.000394	0.000466
A8-CL	0.000933	0.007938	0.004225	0.011056	0.001769	0.000670	0.000670	0.000552	0.001162	0.000670	0.001081	0.001215	0.000992	0.001090	0.001071	0.001065	0.000927	0.001156
A9-CL	0.053168	0.052827	0.009566	0.037805	0.048462	0.007581	0.007581	0.024319	0.035199	0.007581	0.031797	0.046866	0.028970	0.051164	0.037069	0.070439	0.031231	0.064706
A10-CL	0.003403	0.004009	0.000855	0.003230	0.030009	0.000597	0.000597	0.002657	0.002493	0.000597	0.002888	0.003495	0.002554	0.003578	0.003011	0.004133	0.002743	0.004055
A11-CL	0.005350	0.006471	0.001203	0.004920	0.005382	0.000890	0.000890	0.075851	0.003773	0.000890	0.005782	0.005753	0.006677	0.007877	0.005318	0.007251	0.006390	0.006388
A12-CL	0.001936	0.026574	0.000442	0.001809	0.004974	0.001779	0.001779	0.001207	0.001418	0.001779	0.002265	0.002719	0.002038	0.002343	0.001879	0.002097	0.002098	0.002482
A1-CS	0.057280	0.063220	0.011450	0.045803	0.070217	0.009172	0.009172	0.029236	0.045697	0.009172	0.044246	0.061153	0.039546	0.064475	0.045404	0.073538	0.042242	0.076222
A2-CS	0.019774	0.026052	0.004628	0.019473	0.020434	0.005035	0.005035	0.011418	0.014912	0.005035	0.025261	0.034132	0.021581	0.025952	0.017532	0.019745	0.022975	0.028004
A3-CS	0.010562	0.000331	0.000063	0.000245	0.000285	0.000071	0.000071	0.000164	0.000237	0.000071	0.000227	0.000235	0.000247	0.000265	0.000661	0.000542	0.000255	0.000396
A5-CS	0.003164	0.007047	0.017101	0.097150	0.003402	0.001699	0.001699	0.001725	0.006739	0.001699	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729	0.002589	0.003688
A6-CS	0.000338	0.004392	0.000670	0.000316	0.000838	0.000295	0.000295	0.000210	0.000248	0.000295	0.000394	0.000473	0.000355	0.000411	0.000331	0.000372	0.000368	0.000433
A7-CS	0.000909	0.012476	0.000208	0.000849	0.002335	0.000835	0.000835	0.000566	0.000666	0.000835	0.001063	0.001276	0.000957	0.001100	0.000882	0.000984	0.000985	0.001165
A8-CS	0.002596	0.025868	0.010576	0.020250	0.005416	0.001981	0.001981	0.001563	0.002740	0.001981	0.003014	0.003468	0.002745	0.003081	0.002822	0.002936	0.002673	0.003257
A10-CS	0.009532	0.011263	0.002400	0.009050	0.085325	0.001678	0.001678	0.007499	0.006978	0.001678	0.008136	0.009823	0.007195	0.010049	0.008461	0.011538	0.007713	0.011379
A11-CS	0.002559	0.003095	0.000575	0.002353	0.002574	0.000426	0.000426	0.036276	0.001804	0.000426	0.002765	0.002751	0.003193	0.003767	0.002543	0.003468	0.003056	0.003055
A12-CS	0.007134	0.097936	0.001631	0.006667	0.018332	0.006557	0.006557	0.004447	0.005227	0.006557	0.008346	0.010020	0.007510	0.008633	0.006926	0.007728	0.007732	0.009149

	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-BS	Ld-CL	Ld-CS	Ld-TL	Ld-TS	Ld-HTL	Ld-HTS
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
A1-TL	0.031698	0.034397	0.006242	0.024917	0.039595	0.005061	0.005061	0.015948	0.023986	0.005061	0.023661	0.033014	0.021186	0.034582	0.024880	0.040771	0.022489	0.041483
A2-TL	0.002805	0.003532	0.000637	0.002664	0.002831	0.000830	0.000830	0.015999	0.002043	0.000830	0.003417	0.004327	0.003109	0.003595	0.002958	0.002922	0.003316	0.003819
A3-TL	0.083174	0.002604	0.000498	0.001931	0.002244	0.000559	0.000559	0.001289	0.001867	0.000559	0.001786	0.001848	0.001943	0.002089	0.005204	0.004270	0.002011	0.003119
A4-TL	0.016635	0.000521	0.000100	0.000386	0.000449	0.000112	0.000112	0.000258	0.000373	0.000112	0.000357	0.000370	0.000389	0.000418	0.001041	0.000854	0.000402	0.000624
A5-TL	0.001183	0.002496	0.006414	0.036746	0.001254	0.000631	0.000631	0.000644	0.002540	0.000631	0.001361	0.001351	0.001294	0.001274	0.001693	0.001395	0.000964	0.001377
A6-TL	0.000052	0.000632	0.000209	0.000049	0.000123	0.000043	0.000043	0.000032	0.000038	0.000043	0.000061	0.000072	0.000054	0.000064	0.000051	0.000058	0.000057	0.000067
A7-TL	0.000091	0.001248	0.000021	0.000085	0.000234	0.000084	0.000084	0.000057	0.000067	0.000084	0.000106	0.000128	0.000096	0.000110	0.000088	0.000098	0.000098	0.000117
A8-TL	0.000715	0.006548	0.004144	0.005761	0.001419	0.000512	0.000512	0.000428	0.000763	0.000512	0.000827	0.000949	0.000754	0.000850	0.000785	0.000821	0.000738	0.000895
A9-TL	0.050843	0.051572	0.009353	0.036938	0.047143	0.007413	0.007413	0.023734	0.034474	0.007413	0.030942	0.045520	0.028217	0.049806	0.036247	0.069748	0.030493	0.062621
A10-TL	0.005540	0.006583	0.001403	0.005272	0.051233	0.000983	0.000983	0.004424	0.004060	0.000983	0.004744	0.005731	0.004190	0.005865	0.004881	0.006678	0.004525	0.006636
A11-TL	0.002384	0.002884	0.000536	0.002193	0.002398	0.000397	0.000397	0.033803	0.001681	0.000397	0.002577	0.002564	0.002976	0.003510	0.002370	0.003231	0.002848	0.002847
A12-TL	0.001227	0.016842	0.000280	0.001147	0.003153	0.001128	0.001128	0.000765	0.000899	0.001128	0.001435	0.001723	0.001292	0.001485	0.001191	0.001329	0.001330	0.001573
A1-TS	0.088001	0.098122	0.017763	0.071150	0.108484	0.014160	0.014160	0.045400	0.072829	0.014160	0.069231	0.095374	0.062196	0.100848	0.069790	0.112865	0.066544	0.117898
A2-TS	0.019881	0.025107	0.004514	0.018864	0.020034	0.006373	0.006373	0.011430	0.014439	0.006373	0.024317	0.030564	0.022489	0.025833	0.021401	0.020605	0.024581	0.027197
A3-TS	0.050168	0.001571	0.000300	0.001165	0.001354	0.000337	0.000337	0.000777	0.001126	0.000337	0.001077	0.001115	0.001172	0.001260	0.003139	0.002575	0.001213	0.001881
A4-TS	0.155258	0.004861	0.000930	0.003604	0.004189	0.001044	0.001044	0.002405	0.003485	0.001044	0.003333	0.003450	0.003627	0.003900	0.009715	0.007970	0.003754	0.005821
A5-TS	0.003788	0.008337	0.021303	0.115555	0.004062	0.002020	0.002020	0.002066	0.008034	0.002020	0.004359	0.004341	0.004140	0.004093	0.005394	0.004473	0.003110	0.004418
A6-TS	0.001630	0.021883	0.001557	0.001524	0.004127	0.001468	0.001468	0.001015	0.001195	0.001468	0.001905	0.002286	0.001714	0.001976	0.001588	0.001777	0.001770	0.002090
A7-TS	0.001818	0.024952	0.000415	0.001699	0.004671	0.001670	0.001670	0.001133	0.001332	0.001670	0.002126	0.002553	0.001913	0.002200	0.001765	0.001969	0.001970	0.002331
A8-TS	0.006488	0.064665	0.025460	0.051895	0.013535	0.004965	0.004965	0.003905	0.006908	0.004965	0.007534	0.006865	0.006865	0.007692	0.007068	0.007332	0.006667	0.008135
A10-TS	0.027125	0.032108	0.006836	0.025751	0.244961	0.004784	0.004784	0.021435	0.019844	0.004784	0.023249	0.028011	0.020560	0.028639	0.024147	0.032756	0.022000	0.032416
A11-TS	0.006339	0.007667	0.001426	0.005830	0.006376	0.001055	0.001055	0.089866	0.004470	0.001055	0.006850	0.006816	0.007911	0.009332	0.006301	0.008591	0.007571	0.007568
A12-TS	0.006589	0.090450	0.001506	0.006158	0.016931	0.006056	0.006056	0.004107	0.004827	0.006056	0.007708	0.009254	0.006936	0.007973	0.006396	0.007137	0.007141	0.008450
A13-TS	0.007048	0.007565	0.001471	0.005765	0.006499	0.004109	0.004109	0.004339	0.530608	0.004109	0.005070	0.005647	0.012623	0.006191	0.009222	0.008874	0.011653	0.011160
A1-HTL	0.004539	0.004900	0.000890	0.003548	0.005702	0.000725	0.000725	0.002271	0.003349	0.000725	0.003356	0.004695	0.002991	0.004899	0.003566	0.005838	0.003174	0.005923
A2-HTL	0.000908	0.001184	0.000211	0.000886	0.000932	0.000242	0.000242	0.000523	0.000678	0.000242	0.001151	0.001529	0.000999	0.001187	0.000848	0.000914	0.001063	0.001275
A5-HTL	0.000254	0.000576	0.001290	0.007875	0.000274	0.000138	0.000138	0.000138	0.000545	0.000138	0.000292	0.000290	0.000278	0.000273	0.000363	0.000299	0.000207	0.000296
A6-HTL	0.000036	0.000329	0.000403	0.000034	0.000072	0.000023	0.000023	0.000022	0.000026	0.000023	0.000041	0.000049	0.000037	0.000045	0.000037	0.000043	0.000040	0.000046
A7-HTL	0.000014	0.000187	0.000003	0.000013	0.000035	0.000013	0.000013	0.000008	0.000010	0.000013	0.000016	0.000019	0.000014	0.000016	0.000013	0.000015	0.000015	0.000017
A8-HTL	0.000079	0.000666	0.001005	0.000074	0.000150	0.000047	0.000047	0.000048	0.000058	0.000047	0.000090	0.000107	0.000081	0.000098	0.000081	0.000095	0.000088	0.000100
A10-HTL	0.000555	0.000654	0.000139	0.000525	0.004854	0.000097	0.000097	0.000433	0.000405	0.000097	0.000477	0.000572	0.000422	0.000584	0.000502	0.000672	0.000446	0.000662
A11-HTL	0.000872	0.001055	0.000196	0.000802	0.000877	0.000145	0.000145	0.012367	0.000615	0.000145	0.000943	0.000938	0.001089	0.001284	0.000867	0.001182	0.001042	0.001042
A12-HTL	0.000168	0.002308	0.000038	0.000157	0.000432	0.000155	0.000155	0.000105	0.000123	0.000155	0.000197	0.000236	0.000177	0.000203	0.000163	0.000182	0.000182	0.000216
A1-HTS	0.020583	0.022352	0.004045	0.016141	0.023941	0.003248	0.003248	0.010281	0.015369	0.003248	0.015369	0.021387	0.013574	0.022575	0.016402	0.026525	0.014449	0.027309
A2-HTS	0.016626	0.021279	0.003810	0.015954	0.016880	0.005058	0.005058	0.009582	0.012210	0.005058	0.020617	0.026495	0.018657	0.021711	0.016989	0.017030	0.020312	0.023001
A4-HTS	0.145489	0.004555	0.000871	0.003377	0.003926	0.000978	0.000978	0.002254	0.003266	0.000978	0.003124	0.003233	0.003399	0.003655	0.009103	0.007469	0.003518	0.005455
A5-HTS	0.000958	0.002240	0.005328	0.028899	0.001045	0.000515	0.000515	0.000524	0.002017	0.000515	0.001103	0.001101	0.001047	0.001037	0.001360	0.001130	0.000790	0.001119
A6-HTS	0.000935	0.012509	0.001004	0.000875	0.002362	0.000839	0.000839	0.000582	0.000685	0.000839	0.001093	0.001311	0.000983	0.001134	0.000911	0.001021	0.001016	0.001199
A7-HTS	0.000545	0.007486	0.000125	0.000510	0.001401	0.000501	0.000501	0.000340	0.000399	0.000501	0.000638	0.000766	0.000574	0.000660	0.000529	0.000591	0.000591	0.000699
A8-HTS	0.004153	0.044808	0.012938	0.026797	0.009103	0.003318	0.003318	0.002519	0.004120	0.003318	0.004830	0.005607	0.004389	0.004946	0.004416	0.004651	0.004318	0.005233
A10-HTS	0.013843	0.016400	0.003492	0.013147	0.125628	0.002444	0.002444	0.010964	0.010130	0.002444	0.01869	0.014303	0.010494	0.014625	0.012306	0.016708	0.011243	0.016552
A11-HTS	0.002094	0.002532	0.000471	0.001925	0.002106	0.000348	0.000348	0.029681	0.001476	0.000348	0.002263	0.002251	0.002613	0.003082	0.002081	0.002837	0.002500	0.002500
A12-HTS	0.005771	0.079222	0.001319	0.005393	0.014829	0.005304	0.005304	0.003597	0.004228	0.005304	0.006751	0.008105	0.006075	0.006984	0.005602	0.006251	0.006255	0.007401

	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-BS	Ld-CL	Ld-CS	Ld-TL	Ld-TS	Ld-HTL	Ld-HTS
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
A13-HTS	0.002408	0.002585	0.000503	0.001970	0.002221	0.001404	0.001404	0.001483	0.181323	0.001404	0.001733	0.001930	0.004313	0.002116	0.003151	0.003033	0.003982	0.003814
A1-LL	0.000647	0.000698	0.000126	0.000503	0.000724	0.000101	0.000101	0.000321	0.000487	0.000101	0.000472	0.000662	0.000420	0.000704	0.000509	0.000839	0.000447	0.000854
A2-LL	0.000282	0.000362	0.000065	0.000272	0.000287	0.000076	0.000076	0.000161	0.000208	0.000076	0.000352	0.000460	0.000309	0.000364	0.000274	0.000287	0.000325	0.000390
A5-LL	0.000082	0.000150	0.000429	0.002622	0.000084	0.000043	0.000043	0.000044	0.000179	0.000043	0.000094	0.000093	0.000089	0.000087	0.000118	0.000096	0.000066	0.000095
A6-LL	0.000022	0.000141	0.000400	0.000021	0.000037	0.000010	0.000010	0.000013	0.000016	0.000010	0.000025	0.000030	0.000023	0.000028	0.000023	0.000028	0.000025	0.000029
A7-LL	0.000009	0.000125	0.000002	0.000008	0.000023	0.000008	0.000008	0.000006	0.000007	0.000008	0.000011	0.000013	0.000010	0.000011	0.000009	0.000010	0.000010	0.000012
A8-LL	0.000056	0.000354	0.001000	0.000053	0.000092	0.000026	0.000026	0.000034	0.000041	0.000026	0.000064	0.000075	0.000057	0.000070	0.000058	0.000070	0.000063	0.000071
A10-LL	0.000197	0.000229	0.000048	0.000184	0.001571	0.000034	0.000034	0.000148	0.000142	0.000034	0.000172	0.000203	0.000153	0.000205	0.000187	0.000239	0.000154	0.000233
A11-LL	0.000349	0.000422	0.000078	0.000321	0.000351	0.000058	0.000058	0.004947	0.000246	0.000058	0.000377	0.000375	0.000435	0.000514	0.000347	0.000473	0.000417	0.000417
A12-LL	0.000045	0.000624	0.000010	0.000042	0.000117	0.000042	0.000042	0.000028	0.000033	0.000042	0.000053	0.000064	0.000048	0.000055	0.000044	0.000049	0.000049	0.000058
A1-LS	0.005156	0.005651	0.001020	0.004076	0.005812	0.000813	0.000813	0.002584	0.003875	0.000813	0.003954	0.005441	0.003431	0.005749	0.004215	0.006615	0.003667	0.006961
A2-LS	0.003292	0.004115	0.000744	0.003106	0.003308	0.001050	0.001050	0.001880	0.002380	0.001050	0.003969	0.004947	0.003692	0.004233	0.003600	0.003453	0.004016	0.004460
A5-LS	0.000417	0.000876	0.002148	0.013119	0.000441	0.000224	0.000224	0.000227	0.000903	0.000224	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491	0.000338	0.000485
A6-LS	0.000370	0.004999	0.000282	0.000346	0.000941	0.000335	0.000335	0.000230	0.000271	0.000335	0.000433	0.000519	0.000389	0.000448	0.000360	0.000403	0.000402	0.000475
A7-LS	0.000273	0.003743	0.000062	0.000255	0.000701	0.000251	0.000251	0.000170	0.000200	0.000251	0.000319	0.000383	0.000287	0.000330	0.000265	0.000295	0.000295	0.000350
A8-LS	0.001687	0.021946	0.001389	0.004123	0.004179	0.001504	0.001504	0.001044	0.001356	0.001504	0.001971	0.002346	0.001779	0.002032	0.001679	0.001841	0.001808	0.002154
A10-LS	0.002586	0.003052	0.000650	0.002452	0.022937	0.000454	0.000454	0.002027	0.001891	0.000454	0.002212	0.002665	0.001957	0.002724	0.002310	0.003130	0.002087	0.003085
A11-LS	0.004885	0.005909	0.001099	0.004493	0.004914	0.000813	0.000813	0.069255	0.003445	0.000813	0.005279	0.005253	0.006097	0.007192	0.004856	0.006620	0.005834	0.005832
A12-LS	0.000650	0.008920	0.000149	0.000607	0.001670	0.000597	0.000597	0.000405	0.000476	0.000597	0.000760	0.000913	0.000684	0.000786	0.000631	0.000704	0.000704	0.000833
A1-OL	0.012257	0.013085	0.002378	0.009474	0.015332	0.001950	0.001950	0.006073	0.008787	0.001950	0.008875	0.012460	0.007969	0.013001	0.009639	0.015765	0.008336	0.015826
A2-OL	0.002190	0.002923	0.000518	0.002184	0.002284	0.000511	0.000511	0.001265	0.001674	0.000511	0.002827	0.003910	0.002353	0.002882	0.001792	0.002165	0.002493	0.003135
A3-OL	0.050890	0.001819	0.000348	0.001349	0.001567	0.000391	0.000391	0.000900	0.001304	0.000391	0.001247	0.001291	0.001357	0.001459	0.003635	0.002982	0.001405	0.002178
A5-OL	0.000417	0.000876	0.002148	0.013119	0.000441	0.000224	0.000224	0.000227	0.000903	0.000224	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491	0.000338	0.000485
A6-OL	0.000066	0.000819	0.000212	0.000062	0.000159	0.000055	0.000055	0.000041	0.000048	0.000055	0.000077	0.000092	0.000069	0.000080	0.000065	0.000073	0.000072	0.000084
A7-OL	0.000068	0.000936	0.000016	0.000064	0.000175	0.000063	0.000063	0.000042	0.000050	0.000063	0.000080	0.000096	0.000072	0.000082	0.000066	0.000074	0.000074	0.000087
A8-OL	0.000398	0.001022	0.001157	0.013100	0.000443	0.000231	0.000231	0.000216	0.000889	0.000231	0.000459	0.000451	0.000438	0.000422	0.000576	0.000460	0.000314	0.000460
A9-OL	0.065859	0.066112	0.011982	0.047336	0.060566	0.009498	0.009498	0.030431	0.044124	0.009498	0.039738	0.058506	0.036221	0.063934	0.046433	0.088807	0.039098	0.080599
A10-OL	0.007670	0.009156	0.001950	0.007307	0.072648	0.001368	0.001368	0.006197	0.005621	0.001368	0.006605	0.007965	0.005831	0.008149	0.006751	0.009207	0.006307	0.009212
A11-OL	0.000756	0.000914	0.000170	0.000695	0.000760	0.000126	0.000126	0.010718	0.000533	0.000126	0.000817	0.000813	0.000944	0.001113	0.000751	0.001025	0.000903	0.000903
A12-OL	0.000432	0.005926	0.000099	0.000403	0.001109	0.000397	0.000397	0.000269	0.000316	0.000397	0.000505	0.000606	0.000454	0.000522	0.000419	0.000468	0.000468	0.000554
A1-OS	0.009972	0.011138	0.002013	0.008066	0.011786	0.001593	0.001593	0.005136	0.008317	0.001593	0.007863	0.010807	0.007040	0.011498	0.007944	0.012811	0.007546	0.013442
A2-OS	0.006411	0.008343	0.001488	0.006252	0.006583	0.001746	0.001746	0.003694	0.004788	0.001746	0.008071	0.010715	0.007045	0.008381	0.005997	0.006481	0.007569	0.008987
A5-OS	0.002108	0.004694	0.010747	0.065614	0.002265	0.001141	0.001141	0.001148	0.004532	0.001141	0.002427	0.002409	0.002308	0.002268	0.003016	0.002480	0.001715	0.002454
A6-OS	0.000107	0.001268	0.000518	0.000101	0.000250	0.000086	0.000086	0.000066	0.000079	0.000086	0.000125	0.000149	0.000112	0.000131	0.000106	0.000121	0.000118	0.000138
A7-OS	0.000136	0.001871	0.000031	0.000127	0.000350	0.000125	0.000125	0.000085	0.000100	0.000125	0.000159	0.000191	0.000144	0.000165	0.000132	0.000148	0.000148	0.000175
A8-OS	0.000830	0.008959	0.002196	0.005868	0.001819	0.000669	0.000669	0.000503	0.000847	0.000669	0.000966	0.001118	0.000879	0.000985	0.000888	0.000926	0.000857	0.001044
A10-OS	0.004707	0.005554	0.001184	0.004468	0.041803	0.000827	0.000827	0.003689	0.003446	0.000827	0.004010	0.004844	0.003546	0.004956	0.004178	0.005706	0.003801	0.005614
A11-OS	0.002315	0.002800	0.000521	0.002129	0.002328	0.000385	0.000385	0.032814	0.001632	0.000385	0.002501	0.002489	0.002889	0.003408	0.002301	0.003137	0.002764	0.002763
A12-OS	0.001863	0.025576	0.000426	0.001741	0.004787	0.001712	0.001712	0.001161	0.001365	0.001712	0.002180	0.002617	0.001961	0.002255	0.001809	0.002018	0.002019	0.002389
A14	0.102491	0.108156	0.019477	0.077493	0.096020	0.016148	0.016148	0.048700	0.070021	0.016148	0.072331	0.101762	0.065762	0.109929	0.092621	0.129791	0.061238	0.138736
A15	0.345656	0.379934	0.070725	0.290823	0.364013	1.048612	1.048612	0.210805	0.244679	1.048612	0.416311	0.378562	0.413829	0.397302	0.375997	0.396341	0.412692	0.380038
C-1	0.298035	0.302105	0.054679	0.216365	0.276297	0.043722	0.043722	0.138498	0.200770	0.043722	0.186050	0.271107	0.169419	0.295349	0.221038	0.396143	0.177647	0.372131
C-2	0.051910	0.065988	0.012437	0.050473	0.186764	0.012063	0.012063	0.033484	0.038737	0.012063	0.058993	0.077480	0.051015	0.063767	0.046313	0.055513	0.054604	0.069677



	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-BS	Ld-CL	Ld-CS	Ld-TL	Ld-TS	Ld-HTL	Ld-HTS
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
C-3	0.237275	0.305639	0.055800	0.218799	0.252373	0.043107	0.043107	0.140107	0.209779	0.043107	0.171982	0.253966	0.158700	0.290771	0.215488	0.456128	0.174013	0.358638
C-4	0.053751	0.024230	0.004444	0.018310	0.042373	0.004564	0.004564	0.011461	0.014206	0.004564	0.022289	0.029554	0.019296	0.023564	0.018005	0.020294	0.020590	0.025964
C-5	0.043385	0.046834	0.008411	0.033242	0.041627	0.006566	0.006566	0.020929	0.031210	0.006566	0.027238	0.042665	0.025099	0.047116	0.031566	0.059039	0.026669	0.061673
C-6	0.007321	0.009034	0.001604	0.006648	0.007106	0.001103	0.001103	0.004076	0.004904	0.001103	0.011067	0.010581	0.005640	0.009534	0.008627	0.007520	0.009091	0.009546
C-7	0.071435	0.038567	0.006548	0.026641	0.040532	0.005170	0.005170	0.017977	0.022278	0.005170	0.026268	0.041365	0.023163	0.041727	0.025263	0.021215	0.022673	0.064070
C-8	0.039301	0.041668	0.007508	0.029890	0.037975	0.006202	0.006202	0.018816	0.027311	0.006202	0.028001	0.039320	0.025408	0.042365	0.035060	0.049845	0.024047	0.053107
C-9	0.001162	0.001241	0.000229	0.000957	0.001042	0.000154	0.000154	0.000621	0.000672	0.000154	0.001581	0.001280	0.001419	0.001424	0.001533	0.001121	0.001076	0.001219
C-10	0.039983	0.050257	0.008962	0.035988	0.039808	0.007858	0.007858	0.021833	0.031245	0.007858	0.038047	0.050849	0.034547	0.054609	0.054037	0.051045	0.026300	0.069052
C-11	0.007040	0.002078	0.000392	0.001585	0.005540	0.000380	0.000380	0.001051	0.001242	0.000380	0.001821	0.002367	0.001595	0.001977	0.001667	0.001882	0.001701	0.002218
C-12	0.131022	0.173505	0.030939	0.126510	0.138601	0.021961	0.021961	0.079304	0.176520	0.021961	0.140102	0.180196	0.128463	0.201564	0.110697	0.165190	0.142756	0.203309
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.132914	0.184831	0.032168	0.136109	0.140719	0.027540	0.027540	0.078213	0.103976	0.027540	0.181270	0.259779	0.144424	0.180046	0.093747	0.124732	0.151948	0.197366
C-15	0.042514	0.048829	0.009033	0.037100	0.040536	0.020647	0.020647	0.024384	0.028318	0.020647	0.046973	0.047830	0.052378	0.054739	0.063545	0.047455	0.061583	0.054014
C-16	0.005406	0.005648	0.001047	0.004293	0.004758	0.000702	0.000702	0.002740	0.003347	0.000702	0.006277	0.005833	0.005860	0.005363	0.008938	0.006158	0.003149	0.006030
C-17	0.014736	0.014495	0.003204	0.013619	0.015402	0.002103	0.002103	0.006670	0.010942	0.002103	0.009419	0.012790	0.008477	0.013441	0.012496	0.020848	0.009065	0.015825
C-18	1.030830	0.032275	0.006174	0.023930	0.027815	0.006932	0.006932	0.015971	0.023140	0.006932	0.022132	0.022907	0.024081	0.025894	0.064501	0.052919	0.024927	0.038651
C-19	0.079988	1.098006	0.018281	0.074750	0.205528	0.073510	0.073510	0.049854	0.058600	0.073510	0.093570	0.112336	0.084197	0.096793	0.077649	0.086638	0.086689	0.102572
C-20	0.033550	0.042321	1.007786	0.031875	0.034033	0.005267	0.005267	0.019739	0.024801	0.005267	0.037586	0.043952	0.033627	0.043271	0.036897	0.046193	0.039115	0.042745
C-21	0.026029	0.029062	0.013557	1.062659	0.023855	0.015048	0.015048	0.013702	0.067776	0.015048	0.030081	0.028057	0.029117	0.026455	0.040392	0.029816	0.018472	0.029355
C-22	0.118238	0.141422	0.030125	0.112726	1.131683	0.021149	0.021149	0.096007	0.086675	0.021149	0.019174	0.122966	0.090001	0.125813	0.103888	0.141718	0.097526	0.142181
C-23	0.232805	0.269242	0.049959	0.204345	0.221156	0.033660	0.033660	0.132050	0.157865	0.033660	0.283341	0.259415	0.270734	0.284476	0.264856	0.295590	0.285001	0.276235
C-24	0.055162	0.060485	0.011285	0.047318	0.048673	0.007465	1.007465	0.030367	0.032067	0.007465	0.085198	0.062955	0.079283	0.066040	0.070504	0.054832	0.073599	0.054500
C-25	0.073669	0.089109	0.016569	0.067752	0.074102	0.012261	0.012261	1.044430	0.051946	0.012261	0.079616	0.079214	0.091942	0.108461	0.073227	0.099841	0.087985	0.087959
C-26	0.013412	0.014396	0.002799	0.010971	0.012368	0.007819	0.007819	0.008256	1.009682	0.007819	0.009647	0.010746	0.024019	0.011780	0.017549	0.016886	0.022173	0.021236
C-27	0.057689	0.050207	0.009481	0.039160	0.094184	0.007487	0.007487	0.048388	0.054747	1.007487	0.047773	0.056192	0.063813	0.046786	0.040637	0.045919	0.054093	0.049304
Ld-BL	0.062076	0.049265	0.011411	0.050139	0.053914	0.007290	0.007290	0.022560	0.035890	0.007290	1.034243	0.046998	0.030724	0.049532	0.035997	0.056882	0.032638	0.058655
Ld-BS	0.078942	0.087040	0.022291	0.100902	0.093315	0.012820	0.012820	0.039574	0.064699	0.012820	0.060752	1.083126	0.054385	0.087766	0.061961	0.098608	0.057871	0.102946
Ld-CL	0.021324	0.013965	0.004358	0.020804	0.015651	0.002167	0.002167	0.006292	0.009668	0.002167	0.009319	0.012851	1.008422	0.013379	0.010457	0.016314	0.008734	0.016253
Ld-CS	0.027173	0.029702	0.007862	0.035959	0.032334	0.004418	0.004418	0.013497	0.021724	0.004418	0.020590	0.028229	0.018437	1.029693	0.021277	0.033852	0.019520	0.035052
Ld-TL	0.020338	0.016700	0.003974	0.017619	0.018934	0.002510	0.002510	0.008064	0.011770	0.002510	0.011440	0.015821	0.010286	0.016569	1.012277	0.019618	0.010846	0.019872
Ld-TS	0.043474	0.046010	0.011576	0.051322	0.050238	0.006787	0.006787	0.021005	0.034435	0.006787	0.032229	0.044093	0.029003	0.046529	0.032765	1.052103	0.030814	0.054350
Ld-HTL	0.002161	0.002378	0.000605	0.002813	0.002707	0.000360	0.000360	0.001083	0.001647	0.000360	0.001615	0.002242	0.001442	0.002334	0.001722	1.002774	0.001517	0.002815
Ld-HTS	0.008524	0.009429	0.002405	0.010682	0.009955	0.001398	0.001398	0.004267	0.006578	0.001398	0.006425	0.008877	0.005685	0.009349	0.006880	0.010967	0.006006	1.011287
Ld-LL	0.000316	0.000351	0.000125	0.000640	0.000353	0.000054	0.000054	0.000157	0.000256	0.000054	0.000236	0.000325	0.000211	0.000344	0.000257	0.000409	0.000220	0.000416
Ld-LS	0.001693	0.001919	0.000644	0.003248	0.001929	0.000292	0.000292	0.000852	0.001360	0.000292	0.001324	0.001794	0.001156	0.001885	0.001424	0.002164	0.001213	0.002273
Ld-OL	0.009023	0.006425	0.001465	0.006519	0.007415	0.000979	0.000979	0.002958	0.004360	0.000979	0.004359	0.006064	0.003927	0.006302	0.004844	0.007672	0.004087	0.007676
Ld-OS	0.004934	0.005865	0.002516	0.013398	0.005817	0.000912	0.000912	0.002554	0.004519	0.000912	0.004026	0.005393	0.003622	0.005672	0.004134	0.006293	0.003772	0.006597
Ld-LSd	0.003636	0.004025	0.000729	0.002915	0.004410	0.000582	0.000582	0.001859	0.002928	0.000582	0.002821	0.003896	0.002520	0.004117	1.002888	0.004670	0.002695	0.004859
Lb-BL	0.013952	0.064983	0.004479	0.018565	0.030748	0.005573	0.005573	0.019812	0.010007	0.005573	0.015200	0.017381	0.013398	0.016086	0.012981	0.015204	0.014187	0.017035
Lb-BS	0.065624	0.351850	0.029044	0.125334	0.176748	0.030593	0.030593	0.095531	0.082338	0.030593	0.071461	0.088469	0.065534	0.079183	0.062502	0.074349	0.068153	0.084529
Lb-CL	0.005936	0.027371	0.002358	0.010548	0.012449	0.002515	0.002515	0.019385	0.004262	0.002515	0.006256	0.006958	0.006577	0.007003	0.005893	0.006647	0.006357	0.006987
Lb-CS	0.027994	0.138722	0.011555	0.040405	0.077349	0.012551	0.012551	0.038351	0.021239	0.012551	0.029464	0.035207	0.027240	0.034500	0.027094	0.032267	0.028714	0.035511
Lb-TL	0.017619	0.026650	0.003718	0.012919	0.018057	0.002857	0.002857	0.016516	0.006119	0.002857	0.007616	0.009069	0.007266	0.009294	0.009455	0.009942	0.007583	0.010094

	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	C-26	C-27	Ld-BL	Ld-B5	Ld-CL	Ld-CS	Ld-TL	Ld-TS	Ld-HTL	Ld-HTS
	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162
Lb-TS	0.140079	0.223847	0.030787	0.094769	0.172015	0.023431	0.023431	0.091567	0.138956	0.023431	0.055338	0.065280	0.053540	0.065304	0.057670	0.069884	0.055731	0.071449
Lb-HTL	0.000786	0.003472	0.000568	0.000918	0.001862	0.000314	0.000314	0.004451	0.000578	0.000314	0.000842	0.000964	0.000835	0.001012	0.000754	0.000956	0.002945	0.000983
Lb-HTS	0.094535	0.146558	0.014951	0.045317	0.106882	0.014218	0.014218	0.028141	0.076642	0.014218	0.032972	0.038892	0.031384	0.037076	0.034414	0.038404	0.033150	0.042406
Lb-LL	0.000263	0.000659	0.000293	0.000441	0.000592	0.000069	0.000069	0.000964	0.000196	0.000069	0.000284	0.000314	0.000281	0.000326	0.000280	0.000316	0.000295	0.000325
Lb-LS	0.010516	0.041135	0.003723	0.014507	0.024091	0.004094	0.004094	0.044598	0.007737	0.004094	0.011179	0.012333	0.011124	0.013135	0.010871	0.012724	0.011546	0.013015
Lb-OL	0.002465	0.004466	0.000532	0.002311	0.003713	0.000566	0.000566	0.003640	0.001497	0.000566	0.002512	0.002589	0.002508	0.002650	0.002622	0.002526	0.002793	0.002644
Lb-OS	0.006886	0.037038	0.004103	0.016196	0.017443	0.003363	0.003363	0.011702	0.005585	0.003363	0.007344	0.008686	0.006847	0.008298	0.006796	0.008001	0.007110	0.008761
Lb-HRD	0.106126	0.186611	0.044981	0.190383	0.244324	0.048937	0.048937	0.068261	0.143095	0.048937	0.087907	0.107520	0.080929	0.109249	0.087648	0.119780	0.081999	0.123818
K-BL	0.214424	0.039324	0.014133	0.063429	0.064443	0.006239	0.006239	0.036330	0.023829	0.006239	0.026658	0.033175	0.024766	0.032254	0.032325	0.037908	0.025756	0.037710
K-BS	0.065194	0.083231	0.030522	0.143235	0.060707	0.012265	0.012265	0.041977	0.065311	0.012265	0.052670	0.069581	0.046069	0.057317	0.041228	0.050300	0.047642	0.063077
K-CL	0.076947	0.018706	0.008969	0.040296	0.014986	0.002748	0.002748	0.055309	0.010333	0.002748	0.011282	0.013005	0.011422	0.014368	0.013791	0.016652	0.011287	0.015441
K-CS	0.016967	0.024075	0.012294	0.048575	0.017311	0.003060	0.003060	0.013016	0.009899	0.003060	0.010539	0.013238	0.009576	0.012460	0.010069	0.012619	0.009680	0.013814
K-TL	0.066689	0.009790	0.004956	0.018511	0.010379	0.001480	0.001480	0.017265	0.005218	0.001480	0.005366	0.006202	0.005381	0.006758	0.007981	0.008732	0.005397	0.007816
K-TS	0.123380	0.044635	0.019374	0.070076	0.052864	0.006263	0.006263	0.032476	0.129911	0.006263	0.018649	0.022183	0.019411	0.022973	0.023893	0.027240	0.019453	0.027027
K-HTL	0.001139	0.001504	0.000759	0.003820	0.001640	0.000254	0.000254	0.006258	0.000959	0.000254	0.001180	0.001392	0.001168	0.001456	0.001090	0.001398	0.001154	0.001449
K-HTS	0.088924	0.029211	0.009090	0.028197	0.022174	0.003879	0.003879	0.024712	0.113161	0.003879	0.009717	0.011033	0.011078	0.011268	0.013423	0.013542	0.010982	0.013397
K-LL	0.000384	0.000655	0.000796	0.001141	0.000586	0.000096	0.000096	0.002280	0.000315	0.000096	0.000429	0.000495	0.000425	0.000506	0.000387	0.000463	0.000422	0.000487
K-LS	0.002955	0.009918	0.001599	0.007341	0.005440	0.001011	0.001011	0.022089	0.002334	0.001011	0.003270	0.003592	0.003382	0.003957	0.003028	0.003632	0.003344	0.003663
K-OL	0.046461	0.010117	0.002955	0.016530	0.038766	0.001638	0.001638	0.011536	0.006595	0.001638	0.007257	0.008752	0.006786	0.009032	0.008884	0.011064	0.007110	0.010533
K-OS	0.005360	0.010076	0.005442	0.028470	0.011917	0.001530	0.001530	0.023221	0.005046	0.001530	0.005897	0.006880	0.005692	0.006790	0.005411	0.006333	0.005612	0.006806
B-L	0.297570	0.161538	0.031501	0.138376	0.155608	0.020085	0.020085	0.082743	0.073924	0.020085	1.086705	0.106626	0.078999	0.105424	0.089038	0.116662	0.086896	0.120803
B-S	0.236608	0.559548	0.090034	0.404186	0.372327	0.063344	0.063344	0.193030	0.237113	0.063344	0.217595	1.272211	0.196237	0.251320	0.191643	0.249552	0.217305	0.278751
C-L	0.108926	0.065219	0.016638	0.075599	0.047948	0.008114	0.008114	0.083523	0.027402	0.008114	0.032601	0.038439	0.031727	0.039764	0.034694	0.044560	0.034017	0.044007
C-S	0.090533	0.218931	0.037627	0.150115	0.157618	0.025780	0.025780	0.075812	0.070837	0.025780	0.082374	0.097555	0.075059	1.094673	0.075814	0.096505	0.088114	0.103320
T-L	0.106874	0.055502	0.013089	0.050941	0.049320	0.007137	0.007137	0.043062	0.024293	0.007137	0.027986	0.033961	0.026202	0.034759	1.032153	0.040094	0.029471	0.039805
T-S	0.344776	0.374315	0.075643	0.275181	0.348941	0.050834	0.050834	0.168380	0.346571	0.050834	0.145008	0.172439	0.137371	0.172688	0.148052	1.188499	0.153507	0.194075
HT-L	0.005259	0.008657	0.002174	0.008577	0.007268	0.001088	0.001088	0.012456	0.003862	0.001088	0.005419	0.006100	0.005134	0.006026	0.004848	0.006198	1.008090	0.006440
HT-S	0.210264	0.213813	0.033074	0.112337	0.174093	0.026297	0.026297	0.068351	0.216940	0.026297	0.068221	0.078672	0.065585	0.075936	0.071132	0.081708	0.073974	1.086866
Lo-L	0.001258	0.001966	0.001271	0.002467	0.001782	0.000256	0.000256	0.003558	0.000913	0.000256	0.001440	0.001515	0.001356	0.001440	0.001248	0.001403	0.001781	0.001471
Lo-S	0.029515	0.075988	0.011352	0.047951	0.060161	0.011007	0.011007	0.076427	0.028232	0.011007	0.030155	0.033043	0.028803	0.033357	0.027989	0.033528	0.033121	0.034674
O-L	0.060430	0.023796	0.005467	0.027498	0.052359	0.003543	0.003543	0.019513	0.014069	0.003543	0.017345	0.020436	0.016278	0.020693	0.018860	0.023844	0.018020	0.023660
O-S	0.031326	0.073151	0.016562	0.077229	0.058390	0.010154	0.010154	0.045878	0.028771	0.010154	0.034261	0.037094	0.031616	0.034579	0.034166	0.040269	0.036626	
COM	0.050706	0.056720	0.010505	0.043088	0.046531	0.007048	0.007048	0.028022	0.032654	0.007048	0.061406	0.056662	0.036613	0.061121	0.070702	0.058297	0.073867	0.059419
FA1	0.096589	0.098235	0.018428	0.080031	0.082280	0.011974	0.011974	0.051110	0.047612	0.011974	0.161210	0.124960	0.144045	0.085604	0.105984	0.069555	0.279603	0.078822
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.043375	0.044114	0.008275	0.035939	0.036949	0.005377	0.005377	0.022952	0.021381	0.005377	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235	0.125561	0.035397
FA4	0.097580	0.117260	0.021451	0.091573	0.092672	0.014379	0.014379	0.062048	0.057050	0.014379	0.139875	0.139976	0.169737	0.121960	0.109740	0.083457	0.241207	0.097622
FA5	0.024884	0.028989	0.005360	0.022419	0.023209	0.003582	0.003582	0.014597	0.015598	0.003582	0.035599	0.031654	0.035080	0.028281	0.027095	0.025464	0.041126	0.028154
FA6	0.022505	0.028293	0.004998	0.021404	0.021816	0.003415	0.003415	0.012899	0.013826	0.003415	0.042126	0.039056	0.023599	0.025615	0.016904	0.021233	0.021091	0.021058
FA7	0.043375	0.044114	0.008275	0.035939	0.036949	0.005377	0.005377	0.022952	0.021381	0.005377	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235	0.125561	0.035397
FA8	0.186504	0.194871	0.036132	0.148106	0.164174	0.024222	0.024222	0.094539	0.115489	0.024222	0.216571	0.201259	0.202173	0.185028	0.308398	0.212474	0.108647	0.208054
FA9	0.004885	0.005465	0.001012	0.004151	0.004483	0.000679	0.000679	0.002700	0.003146	0.000679	0.005916	0.005459	0.006129	0.005889	0.006812	0.005616	0.007117	0.005725

	Ld-LL	Ld-LS	Ld-OL	Ld-OS	Ld-LSD	Lb-BL	Lb-BS	Lb-CL	Lb-CS	Lb-TL	Lb-TS	Lb-HTL	Lb-HTS	Lb-LL	Lb-LS	Lb-OL	Lb-OS	Lb-HRD
	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
A1-BL	0.083974	0.118793	0.061326	0.098567	0.069712	0.072607	0.100426	0.064922	0.105969	0.074529	0.120900	0.069366	0.125312	0.083974	0.118793	0.061326	0.098567	0.090301
A2-BL	0.032039	0.021708	0.023451	0.028057	0.025154	0.029549	0.040860	0.024634	0.030230	0.018880	0.022889	0.026160	0.032885	0.032039	0.021708	0.023451	0.028057	0.022404
A3-BL	0.007259	0.008124	0.005573	0.007493	0.006419	0.005953	0.006161	0.006477	0.006964	0.017348	0.014233	0.006704	0.010395	0.007259	0.008124	0.005573	0.007493	0.007957
A5-BL	0.003834	0.002977	0.004370	0.003076	0.003537	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729	0.002589	0.003688	0.003834	0.002977	0.004370	0.003076	0.002768
A6-BL	0.000584	0.000472	0.000473	0.000552	0.000491	0.000546	0.000656	0.000492	0.000567	0.000456	0.000510	0.000508	0.000600	0.000584	0.000472	0.000473	0.000552	0.000436
A7-BL	0.000559	0.000457	0.000461	0.000529	0.000478	0.000532	0.000638	0.000478	0.000550	0.000441	0.000492	0.000492	0.000583	0.000559	0.000457	0.000461	0.000529	0.000422
A8-BL	0.001965	0.001533	0.001784	0.001751	0.001669	0.001802	0.002018	0.001656	0.001810	0.001794	0.001770	0.001534	0.001922	0.001965	0.001533	0.001784	0.001751	0.001423
A9-BL	0.080882	0.136594	0.054734	0.100659	0.064855	0.064079	0.094391	0.058398	0.103110	0.074805	0.142677	0.063000	0.130171	0.080882	0.136594	0.054734	0.100659	0.097853
A10-BL	0.012715	0.016312	0.010795	0.013953	0.011898	0.012634	0.015271	0.011162	0.015632	0.013030	0.017853	0.012045	0.017692	0.012715	0.016312	0.010795	0.013953	0.013107
A11-BL	0.004045	0.004501	0.004321	0.005292	0.003921	0.003457	0.003439	0.003992	0.004709	0.003179	0.004335	0.003820	0.003819	0.004045	0.004501	0.004321	0.005292	0.003374
A12-BL	0.006154	0.005030	0.005070	0.005815	0.005255	0.005847	0.007020	0.005262	0.006049	0.004852	0.005414	0.005417	0.006410	0.006154	0.005030	0.005070	0.005815	0.004638
A1-BS	0.137815	0.193515	0.101245	0.161386	0.114322	0.119212	0.164282	0.106543	0.173842	0.120793	0.195349	0.114280	0.204151	0.137815	0.193515	0.101245	0.161386	0.146931
A2-BS	0.110986	0.074625	0.081499	0.097089	0.087260	0.102526	0.141572	0.085564	0.104562	0.065282	0.078171	0.090881	0.113561	0.110986	0.074625	0.081499	0.097089	0.077182
A3-BS	0.000761	0.000851	0.000584	0.000785	0.000672	0.000624	0.000645	0.000679	0.000730	0.001817	0.001491	0.000702	0.001089	0.000761	0.000851	0.000584	0.000785	0.000834
A5-BS	0.009552	0.007415	0.010875	0.007664	0.008806	0.009066	0.009021	0.008612	0.008500	0.011229	0.009287	0.006450	0.009183	0.009552	0.007415	0.010875	0.007664	0.006893
A6-BS	0.001753	0.001415	0.001418	0.001655	0.001473	0.001639	0.001967	0.001475	0.001701	0.001367	0.001531	0.001524	0.001799	0.001753	0.001415	0.001418	0.001655	0.001307
A7-BS	0.001958	0.001600	0.001613	0.001850	0.001672	0.001861	0.002234	0.001674	0.001925	0.001544	0.001723	0.001724	0.002040	0.001958	0.001600	0.001613	0.001850	0.001476
A8-BS	0.006726	0.005336	0.006081	0.006056	0.005781	0.006274	0.007121	0.005743	0.006322	0.006042	0.006063	0.005411	0.006721	0.006726	0.005336	0.006081	0.006056	0.004940
A10-BS	0.022118	0.028377	0.019012	0.024240	0.020771	0.022013	0.026588	0.019475	0.027200	0.023002	0.031378	0.020830	0.030818	0.022118	0.028377	0.019012	0.024240	0.022894
A11-BS	0.008164	0.009084	0.008721	0.010681	0.007913	0.006976	0.006941	0.008056	0.009504	0.006416	0.008748	0.007709	0.007707	0.008164	0.009084	0.008721	0.010681	0.006809
A12-BS	0.022044	0.018015	0.018159	0.020828	0.018822	0.020945	0.025145	0.018847	0.021666	0.017381	0.019393	0.019404	0.022960	0.022044	0.018015	0.018159	0.020828	0.016612
A13-BS	0.015653	0.002935	0.002243	0.002729	0.003247	0.001510	0.001682	0.003760	0.001844	0.002747	0.002643	0.003471	0.003324	0.015653	0.002935	0.002243	0.002729	0.002020
A1-CL	0.021848	0.031866	0.015580	0.025918	0.018189	0.018817	0.026447	0.016891	0.027614	0.020292	0.033409	0.017770	0.033535	0.021848	0.031866	0.015580	0.025918	0.024303
A2-CL	0.009265	0.006084	0.006550	0.007878	0.007084	0.008458	0.011913	0.006885	0.008574	0.004986	0.006428	0.007238	0.009398	0.009265	0.006084	0.006550	0.007878	0.006371
A3-CL	0.002696	0.003017	0.002070	0.002783	0.002384	0.002211	0.002288	0.002406	0.002587	0.006443	0.005286	0.002490	0.003861	0.002696	0.003017	0.002070	0.002783	0.002956
A5-CL	0.002921	0.002270	0.003325	0.002346	0.002695	0.002776	0.002766	0.002636	0.002603	0.003430	0.002840	0.001978	0.002813	0.002921	0.002270	0.003325	0.002346	0.002110
A6-CL	0.000130	0.000103	0.000103	0.000123	0.000107	0.000119	0.000143	0.000107	0.000124	0.000100	0.000112	0.000111	0.000131	0.000130	0.000103	0.000103	0.000123	0.000096
A7-CL	0.000448	0.000366	0.000369	0.000423	0.000382	0.000425	0.000511	0.000383	0.000440	0.000353	0.000394	0.000394	0.000466	0.000448	0.000366	0.000369	0.000423	0.000337
A8-CL	0.001190	0.000923	0.001063	0.001064	0.001000	0.001081	0.001215	0.000992	0.001090	0.001071	0.001065	0.000927	0.001156	0.001190	0.000923	0.001063	0.001064	0.000857
A9-CL	0.040149	0.067942	0.027140	0.049851	0.032162	0.031797	0.046866	0.028970	0.051164	0.037069	0.070439	0.031231	0.064706	0.040149	0.067942	0.027140	0.049851	0.048487
A10-CL	0.002910	0.003737	0.002481	0.003194	0.002724	0.002888	0.003495	0.002554	0.003578	0.003011	0.004133	0.002743	0.004055	0.002910	0.003737	0.002481	0.003194	0.003014
A11-CL	0.006767	0.007529	0.007228	0.008853	0.006559	0.005782	0.005753	0.006677	0.007877	0.005318	0.007251	0.006390	0.006767	0.006767	0.007529	0.007228	0.008853	0.005643
A12-CL	0.002383	0.001948	0.001963	0.002252	0.002035	0.002265	0.002719	0.002038	0.002343	0.001879	0.002097	0.002098	0.002482	0.002383	0.001948	0.001963	0.002252	0.001796
A1-CS	0.051102	0.072247	0.037351	0.059969	0.042454	0.044246	0.061153	0.039546	0.064475	0.045404	0.073538	0.042242	0.076222	0.051102	0.072247	0.037351	0.059969	0.054936
A2-CS	0.026962	0.018793	0.020731	0.024251	0.021874	0.025261	0.034132	0.021581	0.025952	0.017532	0.019745	0.022975	0.028004	0.026962	0.018793	0.020731	0.024251	0.019147
A3-CS	0.000277	0.000309	0.000212	0.000285	0.000245	0.000227	0.000235	0.000247	0.000265	0.000661	0.000542	0.000255	0.000396	0.000277	0.000309	0.000212	0.000285	0.000303
A5-CS	0.003834	0.002977	0.004370	0.003076	0.003537	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729	0.002589	0.003688	0.003834	0.002977	0.004370	0.003076	0.002768
A6-CS	0.000429	0.000342	0.000340	0.000405	0.000354	0.000394	0.000473	0.000355	0.000411	0.000331	0.000372	0.000368	0.000433	0.000429	0.000342	0.000340	0.000405	0.000316
A7-CS	0.001119	0.000914	0.000922	0.001057	0.000955	0.001063	0.001276	0.000957	0.001100	0.000882	0.000984	0.000985	0.001165	0.001119	0.000914	0.000922	0.001057	0.000843
A8-CS	0.003331	0.002593	0.002825	0.003039	0.002758	0.003014	0.003468	0.002745	0.003081	0.002822	0.002936	0.002673	0.003257	0.003331	0.002593	0.002825	0.003039	0.002406
A10-CS	0.008172	0.010480	0.007007	0.008956	0.007671	0.008136	0.009823	0.007195	0.010049	0.008461	0.011538	0.007713	0.011379	0.008172	0.010480	0.007007	0.008956	0.008442
A11-CS	0.003236	0.003601	0.003457	0.004234	0.003137	0.002765	0.002751	0.003193	0.003767	0.002543	0.003468	0.003056	0.003055	0.003236	0.003601	0.003457	0.004234	0.002699
A12-CS	0.008784	0.007179	0.007236	0.008299	0.007500	0.008346	0.010020	0.007510	0.008633	0.006926	0.007728	0.007732	0.009149	0.008784	0.007179	0.007236	0.008299	0.006619

	Ld-LL	Ld-LS	Ld-OL	Ld-OS	Ld-LSD	Lb-BL	Lb-BS	Lb-CL	Lb-CS	Lb-TL	Lb-TS	Lb-HTL	Lb-HTS	Lb-LL	Lb-LS	Lb-OL	Lb-OS	Lb-HRD
	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
A1-TL	0.027459	0.039421	0.019785	0.032354	0.022791	0.023661	0.033014	0.021186	0.034582	0.024880	0.040771	0.022489	0.041483	0.027459	0.039421	0.019785	0.032354	0.030010
A2-TL	0.003498	0.002732	0.003063	0.003410	0.003106	0.003417	0.004327	0.003109	0.003595	0.002958	0.002922	0.003316	0.003819	0.003498	0.002732	0.003063	0.003410	0.002665
A3-TL	0.002178	0.002437	0.001672	0.002248	0.001926	0.001786	0.001848	0.001943	0.002089	0.005204	0.004270	0.002011	0.003119	0.002178	0.002437	0.001672	0.002248	0.002387
A4-TL	0.000436	0.000487	0.000334	0.000450	0.000385	0.000357	0.000370	0.000389	0.000418	0.001041	0.000854	0.000402	0.000624	0.000436	0.000487	0.000334	0.000450	0.000477
A5-TL	0.001432	0.001112	0.001639	0.001146	0.001324	0.001361	0.001351	0.001294	0.001274	0.001693	0.001395	0.000964	0.001377	0.001432	0.001112	0.001639	0.001146	0.001034
A6-TL	0.000068	0.000053	0.000052	0.000064	0.000054	0.000061	0.000072	0.000054	0.000064	0.000051	0.000058	0.000057	0.000067	0.000068	0.000053	0.000052	0.000064	0.000049
A7-TL	0.000112	0.000091	0.000092	0.000106	0.000096	0.000106	0.000128	0.000096	0.000110	0.000088	0.000098	0.000098	0.000117	0.000112	0.000091	0.000092	0.000106	0.000084
A8-TL	0.000942	0.000717	0.000775	0.000859	0.000758	0.000827	0.000949	0.000754	0.000850	0.000785	0.000821	0.000738	0.000895	0.000942	0.000717	0.000775	0.000859	0.000667
A9-TL	0.039031	0.065622	0.026475	0.048843	0.031367	0.030942	0.045520	0.028217	0.049806	0.036247	0.069748	0.030493	0.062621	0.039031	0.065622	0.026475	0.048843	0.047427
A10-TL	0.004771	0.006118	0.004050	0.005234	0.004466	0.004744	0.005731	0.004190	0.005865	0.004881	0.006678	0.004525	0.006636	0.004771	0.006118	0.004050	0.005234	0.004912
A11-TL	0.003016	0.003355	0.003221	0.003945	0.002923	0.002577	0.002564	0.002976	0.003510	0.002370	0.003231	0.002848	0.002847	0.003016	0.003355	0.003221	0.003945	0.002515
A12-TL	0.001511	0.001235	0.001244	0.001427	0.001290	0.001435	0.001723	0.001292	0.001485	0.001191	0.001329	0.001330	0.001573	0.001511	0.001235	0.001244	0.001427	0.001138
A1-TS	0.079851	0.112199	0.059294	0.093889	0.066632	0.069231	0.095374	0.062196	0.100848	0.069790	0.112865	0.066544	0.117898	0.079851	0.112199	0.059294	0.093889	0.085067
A2-TS	0.024939	0.019587	0.021735	0.024903	0.022284	0.024317	0.030564	0.022489	0.025833	0.021401	0.020605	0.024581	0.027197	0.024939	0.019587	0.021735	0.024903	0.018977
A3-TS	0.001314	0.001470	0.001008	0.001356	0.001161	0.001077	0.001115	0.001172	0.001260	0.003139	0.002575	0.001213	0.001881	0.001314	0.001470	0.001008	0.001356	0.001440
A4-TS	0.004065	0.004549	0.003121	0.004196	0.003594	0.003333	0.003450	0.003627	0.003900	0.009715	0.007970	0.003754	0.005821	0.004065	0.004549	0.003121	0.004196	0.004456
A5-TS	0.004612	0.003570	0.005219	0.003707	0.004232	0.004359	0.004341	0.004140	0.004093	0.005394	0.004473	0.003110	0.004418	0.004612	0.003570	0.005219	0.003707	0.003320
A6-TS	0.002032	0.001644	0.001649	0.001920	0.001712	0.001905	0.002286	0.001714	0.001976	0.001588	0.001777	0.001770	0.002090	0.002032	0.001644	0.001649	0.001920	0.001518
A7-TS	0.002238	0.001829	0.001844	0.002115	0.001911	0.002126	0.002553	0.001913	0.002200	0.001765	0.001969	0.001970	0.002331	0.002238	0.001829	0.001844	0.002115	0.001686
A8-TS	0.008300	0.006474	0.007081	0.007565	0.006898	0.007534	0.008661	0.006865	0.007692	0.007068	0.007332	0.006667	0.008135	0.008300	0.006474	0.007081	0.007565	0.006006
A10-TS	0.023291	0.029834	0.020072	0.025495	0.021914	0.023249	0.028011	0.020560	0.028639	0.024147	0.032756	0.022000	0.032416	0.023291	0.029834	0.020072	0.025495	0.024020
A11-TS	0.008017	0.008920	0.008564	0.010488	0.007771	0.006850	0.006816	0.007911	0.009332	0.006301	0.008591	0.007571	0.007568	0.008017	0.008920	0.008564	0.010488	0.006686
A12-TS	0.008113	0.006630	0.006683	0.007665	0.006927	0.007708	0.009254	0.006936	0.007973	0.006396	0.007137	0.007141	0.008450	0.008113	0.006630	0.006683	0.007665	0.006114
A13-TS	0.052556	0.009856	0.007530	0.009163	0.010901	0.005070	0.005647	0.012623	0.006191	0.009222	0.008874	0.011653	0.011160	0.052556	0.009856	0.007530	0.009163	0.006781
A1-HTL	0.003900	0.005597	0.002769	0.004578	0.003221	0.003356	0.004695	0.002991	0.004899	0.003566	0.005838	0.003174	0.005923	0.003900	0.005597	0.002769	0.004578	0.004277
A2-HTL	0.001214	0.000868	0.000968	0.001112	0.001009	0.001151	0.001529	0.000999	0.001187	0.000848	0.000914	0.001063	0.001275	0.001214	0.000868	0.000968	0.001112	0.000875
A5-HTL	0.000306	0.000239	0.000352	0.000244	0.000284	0.000292	0.000290	0.000278	0.000273	0.000363	0.000299	0.000207	0.000296	0.000306	0.000239	0.000352	0.000244	0.000222
A6-HTL	0.000053	0.000037	0.000035	0.000050	0.000037	0.000041	0.000049	0.000037	0.000045	0.000037	0.000043	0.000040	0.000046	0.000053	0.000037	0.000035	0.000050	0.000035
A7-HTL	0.000017	0.000014	0.000014	0.000016	0.000014	0.000016	0.000019	0.000014	0.000016	0.000013	0.000015	0.000015	0.000017	0.000017	0.000014	0.000014	0.000016	0.000013
A8-HTL	0.000118	0.000082	0.000076	0.000111	0.000081	0.000090	0.000107	0.000081	0.000098	0.000081	0.000095	0.000088	0.000100	0.000118	0.000082	0.000076	0.000111	0.000077
A10-HTL	0.000475	0.000608	0.000418	0.000518	0.000450	0.000477	0.000572	0.000422	0.000584	0.000502	0.000672	0.000446	0.000662	0.000475	0.000608	0.000418	0.000518	0.000491
A11-HTL	0.001103	0.001228	0.001179	0.001443	0.001069	0.000943	0.000938	0.001089	0.001284	0.000867	0.001182	0.001042	0.001042	0.001103	0.001228	0.001179	0.001443	0.000920
A12-HTL	0.000207	0.000169	0.000171	0.000196	0.000177	0.000197	0.000236	0.000177	0.000203	0.000163	0.000182	0.000182	0.000216	0.000207	0.000169	0.000171	0.000196	0.000156
A1-HTS	0.017827	0.025485	0.012521	0.020838	0.014636	0.015369	0.021387	0.013574	0.022575	0.016402	0.026525	0.014449	0.027309	0.017827	0.025485	0.012521	0.020838	0.019529
A2-HTS	0.021421	0.016233	0.017945	0.020784	0.018590	0.020617	0.026495	0.018657	0.021711	0.016989	0.017030	0.020312	0.023001	0.021421	0.016233	0.017945	0.020784	0.015950
A4-HTS	0.003809	0.004263	0.002924	0.003932	0.003368	0.003124	0.003233	0.003399	0.003655	0.009103	0.007469	0.003518	0.005455	0.003809	0.004263	0.002924	0.003932	0.004176
A5-HTS	0.001167	0.000904	0.001316	0.000940	0.001070	0.001103	0.001101	0.001047	0.001037	0.001360	0.001130	0.000790	0.001119	0.001167	0.000904	0.001316	0.000940	0.000840
A6-HTS	0.001168	0.000943	0.000946	0.001103	0.000982	0.001093	0.001311	0.000983	0.001134	0.000911	0.001021	0.001016	0.001199	0.001168	0.000943	0.000946	0.001103	0.000871
A7-HTS	0.000671	0.000549	0.000553	0.000634	0.000573	0.000638	0.000766	0.000574	0.000660	0.000529	0.000591	0.000591	0.000699	0.000671	0.000549	0.000553	0.000634	0.000506
A8-HTS	0.005269	0.004152	0.004462	0.004840	0.004404	0.004830	0.005607	0.004389	0.004946	0.004416	0.004651	0.004318	0.005233	0.005269	0.004152	0.004462	0.004840	0.003846
A10-HTS	0.011894	0.015236	0.010231	0.013023	0.011885	0.011869	0.014303	0.010494	0.014625	0.012306	0.016708	0.011243	0.016552	0.011894	0.015236	0.010231	0.013023	0.012261
A11-HTS	0.002648	0.002946	0.002829	0.003464	0.002567	0.002263	0.002251	0.002613	0.003082	0.002081	0.002837	0.002500	0.002500	0.002648	0.002946	0.002829	0.003464	0.002208
A12-HTS	0.007105	0.005807	0.005853	0.006714	0.006067	0.006751	0.008105	0.006075	0.006984	0.005602	0.006251	0.006255	0.007401	0.007105	0.005807	0.005853	0.006714	0.005355

	Ld-LL	Ld-LS	Ld-OL	Ld-OS	Ld-LSD	Lb-BL	Lb-BS	Lb-CL	Lb-CS	Lb-TL	Lb-TS	Lb-HTL	Lb-HTS	Lb-LL	Lb-LS	Lb-OL	Lb-OS	Lb-HRD
	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
A13-HTS	0.017960	0.003368	0.002573	0.003131	0.003725	0.001733	0.001930	0.004313	0.002116	0.003151	0.003033	0.003982	0.003814	0.017960	0.003368	0.002573	0.003131	0.002317
A1-LL	0.000553	0.000807	0.000387	0.000654	0.000454	0.000472	0.000662	0.000420	0.000704	0.000509	0.000839	0.000447	0.000854	0.000553	0.000807	0.000387	0.000654	0.000614
A2-LL	0.000367	0.000270	0.000304	0.000340	0.000312	0.000352	0.000460	0.000309	0.000364	0.000274	0.000287	0.000325	0.000390	0.000367	0.000270	0.000304	0.000340	0.000269
A5-LL	0.000098	0.000076	0.000114	0.000078	0.000092	0.000094	0.000093	0.000089	0.000087	0.000118	0.000096	0.000066	0.000095	0.000098	0.000076	0.000114	0.000078	0.000071
A6-LL	0.000036	0.000024	0.000021	0.000034	0.000023	0.000025	0.000030	0.000023	0.000028	0.000023	0.000028	0.000025	0.000029	0.000036	0.000024	0.000021	0.000034	0.000022
A7-LL	0.000011	0.000009	0.000009	0.000011	0.000010	0.000011	0.000013	0.000010	0.000011	0.000009	0.000010	0.000010	0.000012	0.000011	0.000009	0.000009	0.000011	0.000008
A8-LL	0.000090	0.000059	0.000053	0.000084	0.000057	0.000064	0.000075	0.000057	0.000070	0.000058	0.000070	0.000063	0.000071	0.000090	0.000059	0.000053	0.000084	0.000056
A10-LL	0.000167	0.000212	0.000158	0.000180	0.000163	0.000172	0.000203	0.000153	0.000205	0.000187	0.000239	0.000154	0.000233	0.000167	0.000212	0.000158	0.000180	0.000173
A11-LL	0.000441	0.000491	0.000471	0.000577	0.000428	0.000377	0.000375	0.000435	0.000514	0.000347	0.000473	0.000417	0.000417	0.000441	0.000491	0.000471	0.000577	0.000368
A12-LL	0.000056	0.000046	0.000046	0.000053	0.000048	0.000053	0.000064	0.000048	0.000055	0.000044	0.000049	0.000049	0.000058	0.000056	0.000046	0.000046	0.000053	0.000042
A1-LS	0.004536	0.006338	0.003143	0.005219	0.003698	0.003954	0.005441	0.003431	0.005749	0.004215	0.006615	0.003667	0.006961	0.004536	0.006338	0.003143	0.005219	0.004913
A2-LS	0.004046	0.003248	0.003596	0.004075	0.003660	0.003969	0.004947	0.003692	0.004233	0.003600	0.003453	0.004016	0.004460	0.004046	0.003248	0.003596	0.004075	0.003127
A5-LS	0.000502	0.000391	0.000581	0.000400	0.000467	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491	0.000338	0.000485	0.000502	0.000391	0.000581	0.000400	0.000364
A6-LS	0.000460	0.000373	0.000375	0.000434	0.000389	0.000433	0.000519	0.000389	0.000448	0.000360	0.000403	0.000402	0.000475	0.000460	0.000373	0.000375	0.000434	0.000344
A7-LS	0.000336	0.000274	0.000277	0.000317	0.000287	0.000319	0.000383	0.000287	0.000330	0.000265	0.000295	0.000295	0.000350	0.000336	0.000274	0.000277	0.000317	0.000253
A8-LS	0.002088	0.001694	0.001741	0.001958	0.001779	0.001971	0.002346	0.001779	0.002032	0.001679	0.001841	0.001808	0.002154	0.002088	0.001694	0.001741	0.001958	0.001563
A10-LS	0.002215	0.002838	0.001917	0.002424	0.002087	0.002212	0.002665	0.001957	0.002724	0.002310	0.003130	0.002087	0.003085	0.002215	0.002838	0.001917	0.002424	0.002289
A11-LS	0.006178	0.006874	0.006600	0.008083	0.005989	0.005989	0.006097	0.007192	0.004856	0.006620	0.005834	0.005832	0.006178	0.006874	0.006600	0.008083	0.005153	
A12-LS	0.000800	0.000654	0.000659	0.000756	0.000683	0.000760	0.000913	0.000684	0.000786	0.000631	0.000704	0.000704	0.000833	0.000800	0.000654	0.000659	0.000756	0.000603
A1-OL	0.010244	0.014975	0.007338	0.012182	0.008576	0.008875	0.012460	0.007969	0.013001	0.009639	0.015765	0.008336	0.015826	0.010244	0.014975	0.007338	0.012182	0.011453
A2-OL	0.003063	0.002060	0.002244	0.002671	0.002403	0.002827	0.003910	0.002353	0.002882	0.001792	0.002165	0.002493	0.003135	0.003063	0.002060	0.002244	0.002671	0.002132
A3-OL	0.001521	0.001702	0.001168	0.001570	0.001345	0.001247	0.001291	0.001357	0.001459	0.003635	0.002982	0.001405	0.002178	0.001521	0.001702	0.001168	0.001570	0.001667
A5-OL	0.000502	0.000391	0.000581	0.000400	0.000467	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491	0.000338	0.000485	0.000502	0.000391	0.000581	0.000400	0.000364
A6-OL	0.000085	0.000067	0.000066	0.000080	0.000069	0.000077	0.000092	0.000069	0.000080	0.000065	0.000073	0.000072	0.000084	0.000085	0.000067	0.000066	0.000080	0.000062
A7-OL	0.000084	0.000069	0.000069	0.000079	0.000072	0.000080	0.000096	0.000072	0.000082	0.000066	0.000074	0.000074	0.000087	0.000084	0.000069	0.000069	0.000079	0.000063
A8-OL	0.000457	0.000369	0.000565	0.000358	0.000448	0.000459	0.000451	0.000438	0.000422	0.000576	0.000460	0.000314	0.000460	0.000457	0.000369	0.000565	0.000358	0.000341
A9-OL	0.050142	0.084527	0.033961	0.062507	0.040236	0.039738	0.058506	0.036221	0.063934	0.046433	0.088807	0.039098	0.080599	0.050142	0.084527	0.033961	0.062507	0.060738
A10-OL	0.006629	0.008491	0.005628	0.007269	0.006211	0.006605	0.007965	0.005831	0.008149	0.006751	0.009207	0.006307	0.009212	0.006629	0.008491	0.005628	0.007269	0.006803
A11-OL	0.000956	0.001064	0.001021	0.001251	0.000927	0.000817	0.000813	0.000944	0.001113	0.000751	0.001025	0.000903	0.000903	0.000956	0.001064	0.001021	0.001251	0.000797
A12-OL	0.000532	0.000434	0.000438	0.000502	0.000454	0.000505	0.000606	0.000454	0.000522	0.000419	0.000468	0.000468	0.000554	0.000532	0.000434	0.000438	0.000502	0.000401
A1-OS	0.009067	0.012762	0.006714	0.010658	0.007549	0.007863	0.010807	0.007040	0.011498	0.007944	0.012811	0.007546	0.013442	0.009067	0.012762	0.006714	0.010658	0.009669
A2-OS	0.008538	0.006158	0.006766	0.007905	0.007097	0.008071	0.010715	0.007045	0.008381	0.005997	0.006481	0.007569	0.008987	0.008538	0.006158	0.006766	0.007905	0.006183
A5-OS	0.002538	0.001980	0.002926	0.002028	0.002360	0.002427	0.002409	0.002308	0.002268	0.003016	0.002480	0.001715	0.002454	0.002538	0.001980	0.002926	0.002028	0.001840
A6-OS	0.000143	0.000110	0.000107	0.000135	0.000112	0.000125	0.000149	0.000112	0.000131	0.000106	0.000121	0.000118	0.000138	0.000143	0.000110	0.000107	0.000135	0.000102
A7-OS	0.000168	0.000137	0.000138	0.000159	0.000143	0.000159	0.000191	0.000144	0.000165	0.000132	0.000148	0.000148	0.000175	0.000168	0.000137	0.000138	0.000159	0.000126
A8-OS	0.001043	0.000827	0.000900	0.000955	0.000882	0.000966	0.001118	0.000879	0.000985	0.000888	0.000926	0.000857	0.001044	0.001043	0.000827	0.000900	0.000955	0.000766
A10-OS	0.004031	0.005171	0.003454	0.004419	0.003782	0.004010	0.004844	0.003546	0.004956	0.004178	0.005706	0.003801	0.005614	0.004031	0.005171	0.003454	0.004419	0.004169
A11-OS	0.002927	0.003257	0.003127	0.003830	0.002837	0.002501	0.002489	0.002889	0.003408	0.002301	0.003137	0.002764	0.002763	0.002927	0.003257	0.003127	0.003830	0.002441
A12-OS	0.002294	0.001875	0.001890	0.002167	0.001959	0.002180	0.002617	0.001961	0.002255	0.001809	0.002018	0.002019	0.002389	0.002294	0.001875	0.001890	0.002167	0.001729
A14	0.075981	0.115237	0.051115	0.096833	0.068956	0.072331	0.101762	0.065762	0.109929	0.092621	0.129791	0.061238	0.138736	0.075981	0.115237	0.051115	0.096833	0.094428
A15	0.459066	0.368927	0.369594	0.440319	0.385654	0.416311	0.378562	0.413829	0.397302	0.375997	0.396341	0.412692	0.380038	0.459066	0.368927	0.369594	0.440319	0.309023
C-1	0.226281	0.373657	0.153282	0.282705	0.185885	0.186050	0.271107	0.126949	0.295349	0.221038	0.396143	0.177647	0.372131	0.226281	0.373657	0.153282	0.282705	0.274616
C-2	0.062046	0.051953	0.049060	0.058971	0.052311	0.058993	0.077480	0.051015	0.063767	0.046313	0.055513	0.054604	0.069677	0.062046	0.051953	0.049060	0.058971	0.048864



	Ld-LL	Ld-LS	Ld-OL	Ld-OS	Ld-LSD	Lb-BL	Lb-BS	Lb-CL	Lb-CS	Lb-TL	Lb-TS	Lb-HTL	Lb-HTS	Lb-LL	Lb-LS	Lb-OL	Lb-OS	Lb-HRD
	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
C-3	0.220500	0.381430	0.149774	0.295682	0.179618	0.171982	0.253966	0.158700	0.290771	0.215488	0.456128	0.174013	0.358638	0.220500	0.381430	0.149774	0.295682	0.288378
C-4	0.023794	0.018456	0.018424	0.022044	0.019651	0.022289	0.029554	0.019296	0.023564	0.018005	0.020294	0.020590	0.025964	0.023794	0.018456	0.018424	0.022044	0.018072
C-5	0.037570	0.053476	0.022911	0.042857	0.027946	0.027238	0.042665	0.025099	0.047116	0.031566	0.059039	0.026669	0.061673	0.037570	0.053476	0.022911	0.042857	0.042094
C-6	0.009878	0.009476	0.005148	0.007123	0.006228	0.011067	0.010581	0.005640	0.009534	0.008627	0.007520	0.009091	0.009546	0.009878	0.009476	0.005148	0.007123	0.006928
C-7	0.034352	0.071313	0.020441	0.030977	0.024432	0.026268	0.041365	0.023163	0.041727	0.025263	0.021215	0.022673	0.064070	0.034352	0.071313	0.020441	0.030977	0.032587
C-8	0.029749	0.044747	0.020218	0.037543	0.026714	0.028001	0.039320	0.025408	0.042365	0.035060	0.049845	0.024047	0.053107	0.029749	0.044747	0.020218	0.037543	0.036363
C-9	0.000573	0.001271	0.002238	0.001093	0.001497	0.001581	0.001280	0.001419	0.001424	0.001533	0.001121	0.001076	0.001219	0.000573	0.001271	0.002238	0.001093	0.000959
C-10	0.030937	0.038569	0.020450	0.041537	0.033856	0.038047	0.050849	0.034547	0.054609	0.054037	0.051045	0.026300	0.069052	0.030937	0.038569	0.020450	0.041537	0.040869
C-11	0.001939	0.001657	0.001521	0.001846	0.001633	0.001821	0.002367	0.001595	0.001977	0.001667	0.001882	0.001701	0.002218	0.001939	0.001657	0.001521	0.001846	0.001568
C-12	0.156348	0.198767	0.135729	0.183792	0.134952	0.140102	0.180196	0.128463	0.201564	0.110697	0.165190	0.142756	0.203309	0.156348	0.198767	0.135729	0.183792	0.145425
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.200408	0.122192	0.135980	0.164753	0.148802	0.181270	0.259779	0.144424	0.180046	0.093747	0.124732	0.151948	0.197366	0.200408	0.122192	0.135980	0.164753	0.131508
C-15	0.043649	0.045611	0.050042	0.057255	0.049271	0.046973	0.047830	0.052378	0.054739	0.063545	0.047455	0.061583	0.054014	0.043649	0.045611	0.050042	0.057255	0.039544
C-16	0.004301	0.004593	0.008881	0.003541	0.006200	0.006277	0.005833	0.005860	0.005363	0.008938	0.006158	0.003149	0.006030	0.004301	0.004593	0.008881	0.003541	0.004373
C-17	0.010878	0.014914	0.008092	0.012545	0.009293	0.009419	0.012790	0.008477	0.013441	0.012496	0.020848	0.009065	0.015825	0.010878	0.014914	0.008092	0.012545	0.012923
C-18	0.026991	0.030205	0.020721	0.027861	0.023865	0.022132	0.022907	0.024081	0.025894	0.064501	0.052919	0.024927	0.038651	0.026991	0.030205	0.020721	0.027861	0.029586
C-19	0.098481	0.080482	0.081126	0.093049	0.084087	0.093570	0.112336	0.084197	0.096793	0.077649	0.086638	0.086689	0.102572	0.098481	0.080482	0.081126	0.093049	0.074214
C-20	0.062640	0.036672	0.030064	0.058523	0.033712	0.037586	0.043952	0.033627	0.043271	0.036897	0.046193	0.039115	0.042745	0.062640	0.036672	0.030064	0.058523	0.035351
C-21	0.027664	0.023414	0.039888	0.020220	0.029963	0.030081	0.028057	0.029117	0.026455	0.040392	0.029816	0.018472	0.029355	0.027664	0.023414	0.039888	0.020220	0.021568
C-22	0.102361	0.131088	0.086698	0.112256	0.095844	0.101974	0.122966	0.090001	0.125813	0.103888	0.141718	0.097526	0.142181	0.102361	0.131088	0.086698	0.112256	0.104917
C-23	0.370193	0.272429	0.257683	0.309762	0.259389	0.283341	0.259415	0.270734	0.284476	0.264856	0.295590	0.285001	0.276235	0.370193	0.272429	0.257683	0.309762	0.224083
C-24	0.030668	0.049495	0.040717	0.077554	0.066227	0.085198	0.062955	0.079283	0.066040	0.070504	0.054832	0.073599	0.054500	0.030668	0.049495	0.040717	0.077554	0.046345
C-25	0.093176	0.103669	0.099533	0.121897	0.090313	0.079616	0.079214	0.091942	0.108461	0.073227	0.099841	0.087985	0.087959	0.093176	0.103669	0.099533	0.121897	0.077707
C-26	0.100008	0.018754	0.014330	0.017436	0.020744	0.009647	0.010746	0.024019	0.011780	0.017549	0.016886	0.022173	0.021236	0.100008	0.018754	0.014330	0.017436	0.012903
C-27	0.058205	0.047003	0.071193	0.053003	0.060038	0.047773	0.056192	0.063813	0.046786	0.040637	0.045919	0.054093	0.049304	0.058205	0.047003	0.071193	0.053003	0.038596
Ld-BL	0.039561	0.055388	0.029159	0.046123	0.032924	0.034243	0.046998	0.030724	0.049532	0.035997	0.056882	0.032638	0.058655	0.039561	0.055388	0.029159	0.046123	0.042315
Ld-BS	0.070073	0.097337	0.052122	0.081447	0.058277	0.060752	0.083126	0.054385	0.087766	0.061961	0.098608	0.057871	0.102946	0.070073	0.097337	0.052122	0.081447	0.074141
Ld-CL	0.010783	0.015316	0.007894	0.012573	0.009028	0.009319	0.012851	0.008422	0.013379	0.010457	0.016314	0.008734	0.016253	0.010783	0.015316	0.007894	0.012573	0.011802
Ld-CS	0.023721	0.033133	0.017586	0.027605	0.019763	0.020590	0.028229	0.018437	0.029693	0.021277	0.033852	0.019520	0.035052	0.023721	0.033133	0.017586	0.027605	0.025282
Ld-TL	0.013259	0.018826	0.009670	0.015520	0.011040	0.011440	0.015821	0.010286	0.016569	0.012277	0.019618	0.010846	0.019872	0.013259	0.018826	0.009670	0.015520	0.014396
Ld-TS	0.037097	0.051584	0.027854	0.043313	0.031029	0.032229	0.044093	0.029003	0.046529	0.032765	0.052103	0.030814	0.054350	0.037097	0.051584	0.027854	0.043313	0.039241
Ld-HTL	0.001872	0.002653	0.001349	0.002179	0.001551	0.001615	0.002242	0.001442	0.002334	0.001722	0.002774	0.001517	0.002815	0.001872	0.002653	0.001349	0.002179	0.002034
Ld-HTS	0.007435	0.010510	0.005295	0.008627	0.006121	0.006425	0.008877	0.005685	0.009349	0.006880	0.010967	0.006006	0.011287	0.007435	0.010510	0.005295	0.008627	0.008077
Ld-LL	1.000275	0.000391	0.000199	0.000319	0.000227	0.000236	0.000325	0.000211	0.000344	0.000257	0.000409	0.000220	0.000416	1.000275	0.000391	0.000199	0.000319	0.000299
Ld-LS	0.001511	0.002061	0.001083	0.001711	0.001241	0.001324	0.001794	0.001156	0.001885	0.001424	0.002164	0.001213	0.002273	0.001511	0.002061	0.001083	0.001711	0.001608
Ld-OL	0.005024	0.007215	0.003637	0.005912	0.004214	0.004359	0.006064	0.003927	0.006302	0.004844	0.007672	0.004087	0.007676	0.005024	0.007215	0.003637	0.005912	0.005559
Ld-OS	0.004597	0.006194	0.003562	0.005248	0.003864	0.004026	0.005393	0.003622	0.005672	0.004134	0.006293	0.003772	0.006597	0.004597	0.006194	0.003562	0.005248	0.004754
Ld-LSD	0.003260	0.004598	0.002383	0.003823	0.002706	0.002821	0.003896	0.002520	0.004117	0.002888	0.004670	0.002695	0.004859	0.003260	0.004598	0.002383	0.003823	0.003497
Lb-BL	0.015556	0.014320	0.012907	0.015091	0.016476	0.015200	0.017381	0.013398	0.016086	0.012981	0.015204	0.014187	0.017035	0.015556	0.014320	0.012907	0.015091	0.012471
Lb-BS	0.079246	0.070044	0.063681	0.074935	0.073054	0.071461	0.088469	0.065534	0.079183	0.062502	0.074349	0.068153	0.084529	0.079246	0.070044	0.063681	0.074935	0.061687
Lb-CL	0.006738	0.006292	0.006024	0.006765	0.008031	0.006256	0.006958	0.006577	0.007003	0.005893	0.006647	0.006357	0.006987	0.006738	0.006292	0.006024	0.006765	0.005331
Lb-CS	0.031488	0.030384	0.026347	0.031303	0.032216	0.029464	0.035207	0.027240	0.034500	0.027094	0.032267	0.028714	0.035511	0.031488	0.030384	0.026347	0.031303	0.026171
Lb-TL	0.008374	0.009256	0.007069	0.008945	0.008439	0.007616	0.009069	0.007266	0.009294	0.009455	0.009942	0.007583	0.010094	0.008374	0.009256	0.007069	0.008945	0.007556

	Ld-LL	Ld-LS	Ld-OL	Ld-OS	Ld-LSD	Lb-BL	Lb-BS	Lb-CL	Lb-CS	Lb-TL	Lb-TS	Lb-HTL	Lb-HTS	Lb-LL	Lb-LS	Lb-OL	Lb-OS	Lb-HRD
	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
Lb-TS	0.068177	0.063513	0.051322	0.062923	0.059690	0.055338	0.065280	0.053540	0.065304	0.057670	1.069884	0.055731	0.071449	0.068177	0.063513	0.051322	0.062923	0.053193
Lb-HTL	0.000933	0.000930	0.000849	0.001037	0.000842	0.000842	0.000964	0.000835	0.001012	0.000754	0.000956	1.002945	0.000983	0.000933	0.000930	0.000849	0.001037	0.000767
Lb-HTS	0.039652	0.034681	0.029570	0.035126	0.036271	0.032972	0.038892	0.031384	0.037076	0.034414	0.038404	0.033150	1.042406	0.039652	0.034681	0.029570	0.035126	0.030115
Lb-LL	0.006170	0.000298	0.000281	0.000316	0.000364	0.000284	0.000314	0.000281	0.000326	0.000280	0.000316	0.000295	0.000325	1.006170	0.000298	0.000281	0.000316	0.000249
Lb-LS	0.012099	0.014153	0.011042	0.012877	0.013594	0.011179	0.012333	0.011124	0.013135	0.010871	0.012724	0.011546	0.013015	0.012099	0.014153	0.011042	0.012877	0.010238
Lb-OL	0.002632	0.002342	0.003052	0.002366	0.004465	0.002512	0.002589	0.002508	0.002650	0.002622	0.002526	0.002793	0.002644	0.002632	0.002342	0.003052	0.002366	0.001997
Lb-OS	0.007868	0.007548	0.006737	0.009114	0.007775	0.007344	0.008686	0.006847	0.008298	0.006796	0.008001	0.007110	0.008761	0.007868	0.007548	0.006737	0.009114	0.006553
Lb-HRD	0.100453	0.113924	0.078240	0.104327	0.083543	0.087907	0.107520	0.080929	0.109249	0.087648	0.119780	0.081999	0.123818	0.100453	0.113924	0.078240	0.104327	0.090857
K-BL	0.030125	0.032567	0.023546	0.031339	0.025457	0.026658	0.033175	0.024766	0.032254	0.032325	0.037908	0.025756	0.037710	0.030125	0.032567	0.023546	0.031339	0.027749
K-BS	0.059970	0.047638	0.044740	0.054037	0.047070	0.052670	0.069581	0.046069	0.057317	0.041228	0.050300	0.047642	0.063077	0.059970	0.047638	0.044740	0.054037	0.044254
K-CL	0.013091	0.014837	0.011475	0.014804	0.011564	0.011282	0.013005	0.011422	0.014368	0.013791	0.016652	0.011287	0.015441	0.013091	0.014837	0.011475	0.014804	0.012014
K-CS	0.011679	0.011840	0.009591	0.011869	0.009860	0.010539	0.013238	0.009576	0.012460	0.010069	0.012619	0.009680	0.013814	0.011679	0.011840	0.009591	0.011869	0.010032
K-TL	0.006175	0.007118	0.005301	0.006838	0.005479	0.005366	0.006202	0.005381	0.006758	0.007981	0.008732	0.005397	0.007816	0.006175	0.007118	0.005301	0.006838	0.005979
K-TS	0.030678	0.024118	0.018235	0.022921	0.019526	0.018649	0.022183	0.019411	0.022973	0.023893	0.027240	0.019453	0.027027	0.030678	0.024118	0.018235	0.022921	0.019822
K-HTL	0.001317	0.001361	0.001213	0.001471	0.001181	0.001180	0.001392	0.001168	0.001456	0.001090	0.001398	0.001154	0.001449	0.001317	0.001361	0.001213	0.001471	0.001116
K-HTS	0.020136	0.011517	0.009959	0.011934	0.010777	0.009717	0.011033	0.011078	0.011268	0.013423	0.013542	0.010982	0.013397	0.020136	0.011517	0.009959	0.011934	0.009823
K-LL	0.000482	0.000446	0.000444	0.000524	0.000426	0.000429	0.000495	0.000425	0.000506	0.000387	0.000463	0.000422	0.000487	0.000482	0.000446	0.000444	0.000524	0.000379
K-LS	0.003603	0.003573	0.003540	0.004138	0.003358	0.003270	0.003592	0.003382	0.003957	0.003028	0.003632	0.003344	0.003663	0.003603	0.003573	0.003540	0.004138	0.002928
K-OL	0.008016	0.009705	0.006432	0.008710	0.007037	0.007257	0.008752	0.006786	0.009032	0.008884	0.011064	0.007110	0.010533	0.008016	0.009705	0.006432	0.008710	0.007883
K-OS	0.006419	0.006035	0.005944	0.006734	0.005744	0.005897	0.006880	0.005692	0.006790	0.005411	0.006333	0.005612	0.006806	0.006419	0.006035	0.005944	0.006734	0.005164
B-L	0.095221	0.109447	0.074977	0.102797	0.121271	0.1086705	0.106626	0.078999	0.105424	0.089038	0.116662	0.086896	0.120803	0.095221	0.109447	0.074977	0.102797	0.088572
B-S	0.235720	0.240262	0.194036	0.242014	0.279329	0.217595	0.272211	0.196237	0.251320	0.191633	0.249552	0.217305	0.278751	0.235720	0.240262	0.194036	0.242014	0.319843
C-L	0.035513	0.041369	0.030992	0.039993	0.0593317	0.032601	0.038439	0.031727	0.039764	0.034694	0.044560	0.034017	0.044007	0.035513	0.041369	0.030992	0.039993	0.033249
C-S	0.081765	0.091575	0.077971	0.091081	0.118974	0.082374	0.097555	0.075059	0.094673	0.075814	0.096505	0.088114	0.103320	0.081765	0.091575	0.077971	0.091081	0.172431
T-L	0.029765	0.036867	0.026165	0.034239	0.028122	0.027986	0.033961	0.026202	0.034759	0.032153	0.040094	0.029471	0.039805	0.029765	0.036867	0.026165	0.034239	0.029607
T-S	0.168742	0.175755	0.137802	0.168836	0.183448	0.145008	0.172439	0.137371	0.172688	0.148052	0.188499	0.153507	0.194075	0.168742	0.175755	0.137802	0.168836	0.412718
HT-L	0.005687	0.006076	0.005059	0.006362	0.005132	0.005419	0.006100	0.005134	0.006026	0.004848	0.006198	0.008090	0.006440	0.005687	0.006076	0.005059	0.006362	0.004894
HT-S	0.082940	0.074154	0.064937	0.074977	0.070896	0.068221	0.078672	0.065585	0.075936	0.071132	0.081708	0.073974	0.086866	0.082940	0.074154	0.064937	0.074977	0.189441
Lo-L	1.007081	0.001306	0.001572	0.001522	0.001457	0.001440	0.001515	0.001356	0.001440	0.001248	0.001403	0.001781	0.001471	1.007081	0.001306	0.001572	0.001522	0.001131
Lo-S	0.029482	1.033684	0.030562	0.033580	0.031602	0.030155	0.033043	0.028803	0.033357	0.027989	0.033528	0.033121	0.034674	0.029482	1.033684	0.030562	0.033580	0.133618
O-L	0.019007	0.022006	0.015800	0.020358	0.0201269	0.017345	0.020436	0.016278	0.020693	0.018860	0.023844	0.018020	0.023660	0.019007	0.022006	0.015800	0.020358	0.017644
O-S	0.030309	0.032125	0.035393	0.036811	0.032924	0.034261	0.037094	0.031616	0.034579	0.029779	0.034166	0.040269	0.036626	0.030309	0.032125	0.035393	0.036811	0.099774
COM	0.062743	0.052981	0.057893	0.050706	0.134161	0.061406	0.056662	0.063613	0.061121	0.070702	0.058297	0.073867	0.059419	0.062743	0.052981	0.057893	0.050706	0.045121
FA1	0.047473	0.054429	0.215488	0.118340	0.144537	0.161210	0.124960	0.144045	0.085604	0.105984	0.069555	0.279603	0.078822	0.047473	0.054429	0.215488	0.118340	0.066052
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.021319	0.024443	0.096770	0.053143	0.064907	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235	0.125561	0.035397	0.021319	0.024443	0.096770	0.053143	0.029662
FA4	0.100305	0.156623	0.124838	0.135446	0.145085	0.139875	0.139976	0.169737	0.121960	0.109740	0.083457	0.241207	0.097627	0.100305	0.156623	0.124838	0.135446	0.089624
FA5	0.045390	0.029834	0.023017	0.038499	0.030502	0.035599	0.031654	0.035080	0.028281	0.027095	0.025464	0.041126	0.028154	0.045390	0.029834	0.023017	0.038499	0.022849
FA6	0.018663	0.030094	0.014451	0.023093	0.022954	0.042126	0.039056	0.023599	0.025615	0.016904	0.021233	0.021091	0.021058	0.018663	0.030094	0.014451	0.023093	0.020344
FA7	0.021319	0.024443	0.096770	0.053143	0.064907	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235	0.125561	0.035397	0.021319	0.024443	0.096770	0.053143	0.029662
FA8	0.148406	0.158460	0.306419	0.122177	0.213928	0.216571	0.201259	0.202173	0.185028	0.308398	0.212474	0.108647	0.208054	0.148406	0.158460	0.306419	0.122177	0.150894
FA9	0.006045	0.005104	0.005578	0.004885	0.012925	0.005916	0.005459	0.006129	0.005889	0.006812	0.005616	0.007117	0.005725	0.006045	0.005104	0.005578	0.004885	0.004347

	K-BL	K-BS	K-CL	K-CS	K-TL	K-TS	K-HTL	K-HTS	K-LL	K-LS	K-OL	K-OS	B-L	B-S	C-L	C-S	T-L	T-S
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198
A1-BL	0.072607	0.100426	0.064922	0.105969	0.074529	0.120900	0.069366	0.125312	0.083974	0.118793	0.061326	0.098567	0.072607	0.100426	0.064922	0.105969	0.074529	0.120900
A2-BL	0.029549	0.040860	0.024634	0.030230	0.018880	0.022889	0.026160	0.032885	0.032039	0.021708	0.023451	0.028057	0.029549	0.040860	0.024634	0.030230	0.018880	0.022889
A3-BL	0.005953	0.006161	0.006477	0.006964	0.017348	0.014233	0.006704	0.010395	0.007259	0.008124	0.005573	0.007493	0.005953	0.006161	0.006477	0.006964	0.017348	0.014233
A5-BL	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729	0.002589	0.003688	0.003834	0.002977	0.004370	0.003076	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729
A6-BL	0.000546	0.000656	0.000492	0.000567	0.000456	0.000510	0.000508	0.000600	0.000584	0.000472	0.000473	0.000552	0.000546	0.000656	0.000492	0.000567	0.000456	0.000510
A7-BL	0.000532	0.000638	0.000478	0.000550	0.000441	0.000492	0.000492	0.000583	0.000559	0.000457	0.000461	0.000529	0.000532	0.000638	0.000478	0.000550	0.000441	0.000492
A8-BL	0.001802	0.002018	0.001656	0.001810	0.001794	0.001770	0.001534	0.001922	0.001965	0.001533	0.001784	0.001751	0.001802	0.002018	0.001656	0.001810	0.001794	0.001770
A9-BL	0.064079	0.094391	0.058398	0.103110	0.074805	0.142677	0.063000	0.130171	0.080882	0.136594	0.054734	0.100659	0.064079	0.094391	0.058398	0.103110	0.074805	0.142677
A10-BL	0.012634	0.015271	0.011162	0.015632	0.013030	0.017853	0.012045	0.017692	0.012715	0.016312	0.010795	0.013953	0.012634	0.015271	0.011162	0.015632	0.013030	0.017853
A11-BL	0.003457	0.003439	0.003992	0.004709	0.003179	0.004335	0.003820	0.003819	0.004045	0.004501	0.004321	0.005292	0.003457	0.003439	0.003992	0.004709	0.003179	0.004335
A12-BL	0.005847	0.007020	0.005262	0.006049	0.004852	0.005414	0.005417	0.006410	0.006154	0.005030	0.005070	0.005815	0.005847	0.007020	0.005262	0.006049	0.004852	0.005414
A1-BS	0.119212	0.164282	0.106543	0.173842	0.120793	0.195349	0.114280	0.204151	0.137815	0.193515	0.101245	0.161386	0.119212	0.164282	0.106543	0.173842	0.120793	0.195349
A2-BS	0.102526	0.141572	0.085564	0.104562	0.065282	0.078171	0.090881	0.113561	0.110986	0.074625	0.081499	0.097089	0.102526	0.141572	0.085564	0.104562	0.065282	0.078171
A3-BS	0.000624	0.000645	0.000679	0.000730	0.001817	0.001491	0.000702	0.001089	0.000761	0.000851	0.000584	0.000785	0.000624	0.000645	0.000679	0.000730	0.001817	0.001491
A5-BS	0.009066	0.009021	0.008612	0.008500	0.011229	0.009287	0.006450	0.009183	0.009552	0.007415	0.010875	0.007664	0.009066	0.009021	0.008612	0.008500	0.011229	0.009287
A6-BS	0.001639	0.001967	0.001475	0.001701	0.001367	0.001531	0.001524	0.001799	0.001753	0.001415	0.001418	0.001655	0.001639	0.001967	0.001475	0.001701	0.001367	0.001531
A7-BS	0.001861	0.002234	0.001674	0.001925	0.001544	0.001723	0.001724	0.002040	0.001958	0.001600	0.001613	0.001850	0.001861	0.002234	0.001674	0.001925	0.001544	0.001723
A8-BS	0.006274	0.007121	0.005743	0.006322	0.006042	0.006063	0.005411	0.006721	0.006726	0.005336	0.006081	0.006056	0.006274	0.007121	0.005743	0.006322	0.006042	0.006063
A10-BS	0.022013	0.026588	0.019475	0.027200	0.023002	0.031378	0.020830	0.030818	0.022118	0.028377	0.019012	0.024240	0.022013	0.026588	0.019475	0.027200	0.023002	0.031378
A11-BS	0.006976	0.006941	0.008056	0.009504	0.006416	0.008748	0.007709	0.007707	0.008164	0.009084	0.008721	0.010681	0.006976	0.006941	0.008056	0.009504	0.006416	0.008748
A12-BS	0.020945	0.025145	0.018847	0.021666	0.017381	0.019393	0.019404	0.022960	0.022044	0.018015	0.018159	0.020828	0.020945	0.025145	0.018847	0.021666	0.017381	0.019393
A13-BS	0.001510	0.001682	0.003760	0.001844	0.002747	0.002643	0.003471	0.003324	0.015653	0.002935	0.002243	0.002729	0.001510	0.001682	0.003760	0.001844	0.002747	0.002643
A1-CL	0.018817	0.026447	0.016891	0.027614	0.020292	0.033409	0.017770	0.033535	0.021848	0.031866	0.015580	0.025918	0.018817	0.026447	0.016891	0.027614	0.020292	0.033409
A2-CL	0.008458	0.011913	0.006885	0.008574	0.004986	0.006428	0.007238	0.009398	0.009265	0.006084	0.006550	0.007878	0.008458	0.011913	0.006885	0.008574	0.004986	0.006428
A3-CL	0.002211	0.002288	0.002406	0.002587	0.006443	0.005286	0.002490	0.003861	0.002696	0.003017	0.002070	0.002783	0.002211	0.002288	0.002406	0.002587	0.006443	0.005286
A5-CL	0.002776	0.002766	0.002636	0.002603	0.003430	0.002840	0.001978	0.002813	0.002921	0.002270	0.003325	0.002346	0.002776	0.002766	0.002636	0.002603	0.003430	0.002840
A6-CL	0.000119	0.000143	0.000107	0.000124	0.000100	0.000112	0.000111	0.000131	0.000130	0.000103	0.000103	0.000123	0.000119	0.000143	0.000107	0.000124	0.000100	0.000112
A7-CL	0.000425	0.000511	0.000383	0.000440	0.000353	0.000394	0.000394	0.000466	0.000448	0.000366	0.000369	0.000423	0.000425	0.000511	0.000383	0.000440	0.000353	0.000394
A8-CL	0.001081	0.001215	0.000992	0.001090	0.001071	0.001065	0.000927	0.001156	0.001190	0.000923	0.001063	0.001064	0.001081	0.001215	0.000992	0.001090	0.001071	0.001065
A9-CL	0.031797	0.046866	0.028970	0.051164	0.037069	0.070439	0.031231	0.064706	0.040149	0.067942	0.027140	0.049851	0.031797	0.046866	0.028970	0.051164	0.037069	0.070439
A10-CL	0.002888	0.003495	0.002554	0.003578	0.003011	0.004133	0.002743	0.004055	0.002910	0.003737	0.002481	0.003194	0.002888	0.003495	0.002554	0.003578	0.003011	0.004133
A11-CL	0.005782	0.005753	0.006677	0.007877	0.005318	0.007251	0.006390	0.006388	0.006767	0.007529	0.007228	0.008853	0.005782	0.005753	0.006677	0.007877	0.005318	0.007251
A12-CL	0.002265	0.002719	0.002038	0.002343	0.001879	0.002097	0.002098	0.002482	0.002383	0.001948	0.001963	0.002252	0.002265	0.002719	0.002038	0.002343	0.001879	0.002097
A1-CS	0.044246	0.061153	0.039546	0.064475	0.045404	0.073538	0.042242	0.051102	0.072247	0.037351	0.059969	0.044246	0.061153	0.039546	0.064475	0.045404	0.073538	0.042242
A2-CS	0.025261	0.034132	0.021581	0.025952	0.017532	0.019745	0.022975	0.028004	0.026962	0.018793	0.020731	0.024251	0.025261	0.034132	0.021581	0.025952	0.017532	0.019745
A3-CS	0.000227	0.000235	0.000247	0.000265	0.000661	0.000542	0.000255	0.000396	0.000277	0.000309	0.000212	0.000285	0.000227	0.000235	0.000247	0.000265	0.000661	0.000542
A5-CS	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729	0.002589	0.003688	0.003834	0.002977	0.004370	0.003076	0.003641	0.003622	0.003459	0.003413	0.004511	0.003729
A6-CS	0.000394	0.000473	0.000355	0.000411	0.000331	0.000372	0.000368	0.000433	0.000429	0.000342	0.000340	0.000405	0.000394	0.000473	0.000355	0.000411	0.000331	0.000372
A7-CS	0.001063	0.001276	0.000957	0.001100	0.000882	0.000984	0.000985	0.001165	0.001119	0.000914	0.000922	0.001057	0.001063	0.001276	0.000957	0.001100	0.000882	0.000984
A8-CS	0.003014	0.003468	0.002745	0.003081	0.002822	0.002936	0.002673	0.003257	0.003331	0.002593	0.002825	0.003039	0.003014	0.003468	0.002745	0.003081	0.002822	0.002936
A10-CS	0.008136	0.009823	0.007195	0.010049	0.008461	0.011538	0.007713	0.011379	0.008172	0.010480	0.007007	0.008956	0.008136	0.009823	0.007195	0.010049	0.008461	0.011538
A11-CS	0.002765	0.002751	0.003193	0.003767	0.002543	0.003468	0.003056	0.003055	0.003236	0.003601	0.003457	0.004234	0.002765	0.002751	0.003193	0.003767	0.002543	0.003468
A12-CS	0.008346	0.010020	0.007510	0.008633	0.006926	0.007728	0.007732	0.009149	0.008784	0.007179	0.007236	0.008299	0.008346	0.010020	0.007510	0.008633	0.006926	0.007728



	K-BL	K-BS	K-CL	K-CS	K-TL	K-TS	K-HTL	K-HTS	K-LL	K-LS	K-OL	K-OS	B-L	B-S	C-L	C-S	T-L	T-S
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198
A1-TL	0.023661	0.033014	0.021186	0.034582	0.024880	0.040771	0.022489	0.041483	0.027459	0.039421	0.019785	0.032354	0.023661	0.033014	0.021186	0.034582	0.024880	0.040771
A2-TL	0.003417	0.004327	0.003109	0.003595	0.002958	0.002922	0.003316	0.003819	0.003498	0.002732	0.003063	0.003410	0.003417	0.004327	0.003109	0.003595	0.002958	0.002922
A3-TL	0.001786	0.001848	0.001943	0.002089	0.005204	0.004270	0.002011	0.003119	0.002178	0.002437	0.001672	0.002248	0.001786	0.001848	0.001943	0.002089	0.005204	0.004270
A4-TL	0.000357	0.000370	0.000389	0.000418	0.001041	0.000854	0.000402	0.000624	0.000436	0.000487	0.000334	0.000450	0.000357	0.000370	0.000389	0.000418	0.001041	0.000854
A5-TL	0.001361	0.001351	0.001294	0.001274	0.001693	0.001395	0.000964	0.001377	0.001432	0.001112	0.001639	0.001146	0.001361	0.001351	0.001294	0.001274	0.001693	0.001395
A6-TL	0.000061	0.000072	0.000054	0.000064	0.000051	0.000058	0.000057	0.000067	0.000068	0.000053	0.000052	0.000064	0.000061	0.000072	0.000054	0.000064	0.000051	0.000058
A7-TL	0.000106	0.000128	0.000096	0.000110	0.000088	0.000098	0.000098	0.000117	0.000112	0.000091	0.000092	0.000106	0.000106	0.000128	0.000096	0.000110	0.000088	0.000098
A8-TL	0.000827	0.000949	0.000754	0.000850	0.000785	0.000821	0.000738	0.000895	0.000942	0.000717	0.000775	0.000889	0.000827	0.000949	0.000754	0.000850	0.000785	0.000821
A9-TL	0.030942	0.045520	0.028217	0.049806	0.036247	0.030493	0.069748	0.030493	0.065622	0.039031	0.065622	0.026475	0.048843	0.030942	0.045520	0.028217	0.049806	0.036247
A10-TL	0.004744	0.005731	0.004190	0.005865	0.004881	0.006678	0.004525	0.006636	0.004771	0.006118	0.004050	0.005234	0.004744	0.005731	0.004190	0.005865	0.004881	0.006678
A11-TL	0.002577	0.002564	0.002976	0.003510	0.002370	0.003231	0.002848	0.002847	0.003016	0.003355	0.003221	0.003945	0.002577	0.002564	0.002976	0.003510	0.002370	0.003231
A12-TL	0.001435	0.001723	0.001292	0.001485	0.001191	0.001329	0.001330	0.001573	0.001511	0.001235	0.001244	0.001427	0.001435	0.001723	0.001292	0.001485	0.001191	0.001329
A1-TS	0.069231	0.095374	0.062196	0.100848	0.069790	0.112865	0.066544	0.117898	0.079851	0.112199	0.059294	0.093889	0.069231	0.095374	0.062196	0.100848	0.069790	0.112865
A2-TS	0.024317	0.030564	0.022489	0.025833	0.021401	0.020605	0.024581	0.027197	0.024939	0.019587	0.021735	0.024903	0.024317	0.030564	0.022489	0.025833	0.021401	0.020605
A3-TS	0.001077	0.001115	0.001172	0.001260	0.003139	0.002575	0.001213	0.001881	0.001314	0.001470	0.001008	0.001356	0.001077	0.001115	0.001172	0.001260	0.003139	0.002575
A4-TS	0.003333	0.003450	0.003627	0.003900	0.009715	0.007970	0.003754	0.005821	0.004065	0.004549	0.003121	0.004196	0.003333	0.003450	0.003627	0.003900	0.009715	0.007970
A5-TS	0.004359	0.004341	0.004140	0.004093	0.005394	0.004473	0.003110	0.004418	0.004612	0.003570	0.005219	0.003707	0.004359	0.004341	0.004140	0.004093	0.005394	0.004473
A6-TS	0.001905	0.002286	0.001714	0.001976	0.001588	0.001777	0.001770	0.002090	0.002032	0.001644	0.001649	0.001920	0.001905	0.002286	0.001714	0.001976	0.001588	0.001777
A7-TS	0.002126	0.002553	0.001913	0.002200	0.001765	0.001969	0.001970	0.002331	0.002238	0.001829	0.001844	0.002115	0.002126	0.002553	0.001913	0.002200	0.001765	0.001969
A8-TS	0.007534	0.008661	0.006865	0.007692	0.007068	0.007332	0.006667	0.008135	0.008300	0.006474	0.007081	0.007565	0.007534	0.008661	0.006865	0.007692	0.007068	0.007332
A10-TS	0.023249	0.028011	0.020560	0.028639	0.024147	0.032756	0.022000	0.032416	0.023291	0.029834	0.020072	0.025495	0.023249	0.028011	0.020560	0.028639	0.024147	0.032756
A11-TS	0.006850	0.006816	0.007911	0.009332	0.006301	0.008591	0.007571	0.007568	0.008017	0.008920	0.008564	0.010488	0.006850	0.006816	0.007911	0.009332	0.006301	0.008591
A12-TS	0.007708	0.009254	0.006936	0.007973	0.006396	0.007137	0.007141	0.008450	0.008113	0.006630	0.006683	0.007665	0.007708	0.009254	0.006936	0.007973	0.006396	0.007137
A13-TS	0.005070	0.005647	0.012623	0.006191	0.009222	0.008874	0.011653	0.011160	0.052556	0.009856	0.007530	0.009163	0.005070	0.005647	0.012623	0.006191	0.009222	0.008874
A1-HTL	0.003356	0.004695	0.002991	0.004899	0.003566	0.005838	0.003174	0.005923	0.003900	0.005597	0.002769	0.004578	0.003356	0.004695	0.002991	0.004899	0.003566	0.005838
A2-HTL	0.001151	0.001529	0.000999	0.001187	0.000848	0.000914	0.001063	0.001275	0.001214	0.000868	0.000968	0.001112	0.001151	0.001529	0.000999	0.001187	0.000848	0.000914
A5-HTL	0.000292	0.000290	0.000278	0.000273	0.000363	0.000299	0.000207	0.000296	0.000306	0.000239	0.000352	0.000244	0.000292	0.000290	0.000278	0.000273	0.000363	0.000299
A6-HTL	0.000041	0.000049	0.000037	0.000045	0.000037	0.000043	0.000040	0.000046	0.000053	0.000037	0.000035	0.000050	0.000041	0.000049	0.000037	0.000045	0.000037	0.000043
A7-HTL	0.000016	0.000019	0.000014	0.000016	0.000013	0.000015	0.000015	0.000017	0.000017	0.000014	0.000014	0.000016	0.000016	0.000019	0.000014	0.000016	0.000013	0.000015
A8-HTL	0.000090	0.000107	0.000081	0.000098	0.000081	0.000095	0.000088	0.000100	0.000118	0.000082	0.000076	0.000111	0.000090	0.000107	0.000081	0.000098	0.000081	0.000095
A10-HTL	0.000477	0.000572	0.000422	0.000584	0.000502	0.000672	0.000446	0.000662	0.000475	0.000608	0.000418	0.000518	0.000477	0.000572	0.000422	0.000584	0.000502	0.000672
A11-HTL	0.000943	0.000938	0.001089	0.001284	0.000867	0.001182	0.001042	0.001042	0.001103	0.001228	0.001179	0.001443	0.000943	0.000938	0.001089	0.001284	0.000867	0.001182
A12-HTL	0.000197	0.000236	0.000177	0.000203	0.000163	0.000182	0.000182	0.000216	0.000207	0.000169	0.000171	0.000196	0.000197	0.000236	0.000177	0.000203	0.000163	0.000182
A1-HTS	0.015369	0.021387	0.013574	0.022575	0.016402	0.026525	0.014449	0.027309	0.017827	0.025485	0.012521	0.020838	0.015369	0.021387	0.013574	0.022575	0.016402	0.026525
A2-HTS	0.020617	0.026495	0.018657	0.021711	0.016989	0.017030	0.020312	0.023001	0.021421	0.016233	0.017945	0.020784	0.020617	0.026495	0.018657	0.021711	0.016989	0.017030
A4-HTS	0.003124	0.003233	0.003399	0.003655	0.009103	0.007469	0.003518	0.005455	0.003809	0.004263	0.002924	0.003932	0.003124	0.003233	0.003399	0.003655	0.009103	0.007469
A5-HTS	0.001103	0.001101	0.001047	0.001037	0.001360	0.001130	0.000790	0.001119	0.001167	0.000904	0.001316	0.000940	0.001103	0.001101	0.001047	0.001037	0.001360	0.001130
A6-HTS	0.001093	0.001311	0.000983	0.001134	0.000911	0.001021	0.001016	0.001199	0.001168	0.000943	0.000946	0.001103	0.001093	0.001311	0.000983	0.001134	0.000911	0.001021
A7-HTS	0.000638	0.000766	0.000574	0.000660	0.000529	0.000591	0.000591	0.000699	0.000671	0.000549	0.000553	0.000634	0.000638	0.000766	0.000574	0.000660	0.000529	0.000591
A8-HTS	0.004830	0.005607	0.004389	0.004946	0.004416	0.004651	0.004318	0.005233	0.005269	0.004152	0.004462	0.004840	0.004830	0.005607	0.004389	0.004946	0.004416	0.004651
A10-HTS	0.011869	0.014303	0.010494	0.014625	0.012306	0.016708	0.011243	0.016552	0.011894	0.015236	0.010231	0.013023	0.011869	0.014303	0.010494	0.014625	0.012306	0.016708
A11-HTS	0.002263	0.002251	0.002613	0.003082	0.002081	0.002837	0.002500	0.002500	0.002648	0.002946	0.002829	0.003464	0.002263	0.002251	0.002613	0.003082	0.002081	0.002837
A12-HTS	0.006751	0.008105	0.006075	0.006984	0.005602	0.006251	0.006255	0.007401	0.007105	0.005807	0.005853	0.006714	0.006751	0.008105	0.006075	0.006984	0.005602	0.006251

	K-BL	K-BS	K-CL	K-CS	K-TL	K-TS	K-HTL	K-HTS	K-LL	K-LS	K-OL	K-OS	B-L	B-S	C-L	C-S	T-L	T-S
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198
A13-HTS	0.001733	0.001930	0.004313	0.002116	0.003151	0.003033	0.003982	0.003814	0.017960	0.003368	0.002573	0.003131	0.001733	0.001930	0.004313	0.002116	0.003151	0.003033
A1-LL	0.000472	0.000662	0.000420	0.000704	0.000509	0.000839	0.000447	0.000854	0.000553	0.000807	0.000387	0.000654	0.000472	0.000662	0.000420	0.000704	0.000509	0.000839
A2-LL	0.000352	0.000460	0.000309	0.000364	0.000274	0.000287	0.000325	0.000390	0.000367	0.000270	0.000304	0.000340	0.000352	0.000460	0.000309	0.000364	0.000274	0.000287
A5-LL	0.000094	0.000093	0.000089	0.000087	0.000118	0.000096	0.000066	0.000095	0.000098	0.000076	0.000114	0.000078	0.000094	0.000093	0.000089	0.000087	0.000118	0.000096
A6-LL	0.000025	0.000030	0.000023	0.000028	0.000023	0.000028	0.000025	0.000029	0.000036	0.000024	0.000021	0.000034	0.000025	0.000030	0.000023	0.000028	0.000023	0.000028
A7-LL	0.000011	0.000013	0.000010	0.000011	0.000009	0.000010	0.000010	0.000012	0.000011	0.000009	0.000009	0.000011	0.000011	0.000013	0.000010	0.000011	0.000009	0.000010
A8-LL	0.000064	0.000075	0.000057	0.000070	0.000058	0.000070	0.000063	0.000071	0.000090	0.000059	0.000053	0.000084	0.000064	0.000075	0.000057	0.000070	0.000058	0.000070
A10-LL	0.000172	0.000203	0.000153	0.000205	0.000187	0.000239	0.000154	0.000233	0.000167	0.000212	0.000158	0.000180	0.000172	0.000203	0.000153	0.000205	0.000187	0.000239
A11-LL	0.000377	0.000375	0.000435	0.000514	0.000347	0.000473	0.000417	0.000417	0.000441	0.000491	0.000471	0.000577	0.000377	0.000375	0.000435	0.000514	0.000347	0.000473
A12-LL	0.000053	0.000064	0.000048	0.000055	0.000044	0.000049	0.000049	0.000058	0.000056	0.000046	0.000053	0.000053	0.000053	0.000064	0.000048	0.000055	0.000044	0.000049
A1-LS	0.003954	0.005441	0.003431	0.005749	0.004215	0.006615	0.003667	0.006961	0.004536	0.006338	0.003143	0.005219	0.003954	0.005441	0.003431	0.005749	0.004215	0.006615
A2-LS	0.003969	0.004947	0.003692	0.004233	0.003600	0.003453	0.004016	0.004460	0.004046	0.003248	0.003596	0.004075	0.003969	0.004947	0.003692	0.004233	0.003600	0.003453
A5-LS	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491	0.000338	0.000485	0.000502	0.000391	0.000581	0.000400	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491
A6-LS	0.000433	0.000519	0.000389	0.000448	0.000360	0.000403	0.000402	0.000475	0.000460	0.000373	0.000375	0.000434	0.000433	0.000519	0.000389	0.000448	0.000360	0.000403
A7-LS	0.000319	0.000383	0.000287	0.000330	0.000265	0.000295	0.000295	0.000350	0.000336	0.000274	0.000277	0.000317	0.000319	0.000383	0.000287	0.000330	0.000265	0.000295
A8-LS	0.001971	0.002346	0.001779	0.002032	0.001679	0.001841	0.001808	0.002154	0.002088	0.001694	0.001741	0.001958	0.001971	0.002346	0.001779	0.002032	0.001679	0.001841
A10-LS	0.002212	0.002665	0.001957	0.002724	0.002310	0.003130	0.002087	0.003085	0.002215	0.002838	0.001917	0.002424	0.002212	0.002665	0.001957	0.002724	0.002310	0.003130
A11-LS	0.005279	0.005253	0.006097	0.007192	0.004856	0.006620	0.005834	0.005832	0.006178	0.006874	0.006600	0.008083	0.005279	0.005253	0.006097	0.007192	0.004856	0.006620
A12-LS	0.000760	0.000913	0.000684	0.000786	0.000631	0.000704	0.000704	0.000653	0.000800	0.000654	0.000659	0.000756	0.000760	0.000913	0.000684	0.000786	0.000631	0.000704
A1-OL	0.008875	0.012460	0.007969	0.013001	0.009639	0.015765	0.008336	0.015826	0.010244	0.014975	0.007338	0.012182	0.008875	0.012460	0.007969	0.013001	0.009639	0.015765
A2-OL	0.002827	0.003910	0.002353	0.002882	0.001792	0.002165	0.002493	0.003135	0.003063	0.002060	0.002244	0.002671	0.002827	0.003910	0.002353	0.002882	0.001792	0.002165
A3-OL	0.001247	0.001291	0.001357	0.001459	0.003635	0.002982	0.001405	0.002178	0.001521	0.001702	0.001168	0.001570	0.001247	0.001291	0.001357	0.001459	0.003635	0.002982
A5-OL	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491	0.000338	0.000485	0.000502	0.000391	0.000581	0.000400	0.000480	0.000475	0.000457	0.000448	0.000599	0.000491
A6-OL	0.000077	0.000092	0.000069	0.000080	0.000065	0.000073	0.000072	0.000084	0.000085	0.000067	0.000066	0.000080	0.000077	0.000092	0.000069	0.000080	0.000065	0.000073
A7-OL	0.000080	0.000096	0.000072	0.000082	0.000066	0.000074	0.000074	0.000087	0.000084	0.000069	0.000069	0.000079	0.000080	0.000096	0.000072	0.000082	0.000066	0.000074
A8-OL	0.000459	0.000451	0.000438	0.000422	0.000576	0.000460	0.000314	0.000460	0.000457	0.000369	0.000565	0.000358	0.000459	0.000451	0.000438	0.000422	0.000576	0.000460
A9-OL	0.039738	0.058506	0.036221	0.063934	0.046433	0.088807	0.039098	0.080599	0.050142	0.084527	0.033961	0.062507	0.039738	0.058506	0.036221	0.063934	0.046433	0.088807
A10-OL	0.006605	0.007965	0.005831	0.008149	0.006751	0.009207	0.006307	0.009212	0.006629	0.008491	0.005628	0.007269	0.006605	0.007965	0.005831	0.008149	0.006751	0.009207
A11-OL	0.000817	0.000813	0.000944	0.001113	0.000751	0.001025	0.000903	0.000903	0.000956	0.001064	0.001021	0.001251	0.000817	0.000813	0.000944	0.001113	0.000751	0.001025
A12-OL	0.000505	0.000606	0.000454	0.000522	0.000419	0.000468	0.000468	0.000554	0.000532	0.000434	0.000438	0.000502	0.000505	0.000606	0.000454	0.000522	0.000419	0.000468
A1-OS	0.007863	0.010807	0.007040	0.011498	0.007944	0.012811	0.007546	0.013442	0.009067	0.012762	0.006714	0.010658	0.007863	0.010807	0.007040	0.011498	0.007944	0.012811
A2-OS	0.008071	0.010715	0.007045	0.008381	0.005997	0.006481	0.007569	0.008987	0.008538	0.006158	0.006766	0.007905	0.008071	0.010715	0.007045	0.008381	0.005997	0.006481
A5-OS	0.002427	0.002409	0.002308	0.002268	0.003016	0.002480	0.001715	0.002454	0.002538	0.001980	0.002926	0.002028	0.002427	0.002409	0.002308	0.002268	0.003016	0.002480
A6-OS	0.000125	0.000149	0.000112	0.000131	0.000106	0.000121	0.000118	0.000138	0.000143	0.000110	0.000107	0.000135	0.000125	0.000149	0.000112	0.000131	0.000106	0.000121
A7-OS	0.000159	0.000191	0.000144	0.000165	0.000132	0.000148	0.000148	0.000175	0.000168	0.000137	0.000138	0.000159	0.000159	0.000191	0.000144	0.000165	0.000132	0.000148
A8-OS	0.000966	0.001118	0.000879	0.000985	0.000888	0.000926	0.000857	0.001044	0.001043	0.000827	0.000900	0.000955	0.000966	0.001118	0.000879	0.000985	0.000888	0.000926
A10-OS	0.004010	0.004844	0.003546	0.004956	0.004178	0.005706	0.003801	0.005614	0.004031	0.005171	0.003454	0.004419	0.004010	0.004844	0.003546	0.004956	0.004178	0.005706
A11-OS	0.002501	0.002489	0.002889	0.003408	0.002301	0.003137	0.002764	0.002763	0.002927	0.003257	0.003127	0.003830	0.002501	0.002489	0.002889	0.003408	0.002301	0.003137
A12-OS	0.002180	0.002617	0.001961	0.002255	0.001809	0.002018	0.002019	0.002389	0.002294	0.001875	0.001890	0.002167	0.002180	0.002617	0.001961	0.002255	0.001809	0.002018
A14	0.072331	0.101762	0.065762	0.109929	0.092621	0.129791	0.061238	0.138736	0.075981	0.115237	0.051115	0.096833	0.072331	0.101762	0.065762	0.109929	0.092621	0.129791
A15	0.416311	0.378562	0.413829	0.397302	0.375997	0.396341	0.412692	0.380038	0.459066	0.368927	0.369594	0.440319	0.416311	0.378562	0.413829	0.397302	0.375997	0.396341
C-1	0.186050	0.271107	0.169419	0.295349	0.221038	0.396143	0.177647	0.372131	0.226281	0.373657	0.153282	0.282705	0.186050	0.271107	0.169419	0.295349	0.221038	0.396143
C-2	0.058993	0.077480	0.051015	0.063767	0.046313	0.055513	0.054604	0.069677	0.062046	0.051953	0.049060	0.058971	0.058993	0.077480	0.051015	0.063767	0.046313	0.055513

	K-BL	K-BS	K-CL	K-CS	K-TL	K-TS	K-HTL	K-HTS	K-LL	K-LS	K-OL	K-OS	B-L	B-S	C-L	C-S	T-L	T-S
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198
C-3	0.171982	0.253966	0.158700	0.290771	0.215488	0.456128	0.174013	0.358638	0.220500	0.381430	0.149774	0.295682	0.171982	0.253966	0.158700	0.290771	0.215488	0.456128
C-4	0.022289	0.029554	0.019296	0.023564	0.018005	0.020294	0.020590	0.025964	0.023794	0.018456	0.018424	0.022044	0.022289	0.029554	0.019296	0.023564	0.018005	0.020294
C-5	0.027238	0.042665	0.025099	0.047116	0.031566	0.059039	0.026669	0.061673	0.037570	0.053476	0.022911	0.042857	0.027238	0.042665	0.025099	0.047116	0.031566	0.059039
C-6	0.011067	0.010581	0.005640	0.009534	0.008627	0.007520	0.009091	0.009546	0.009878	0.009476	0.005148	0.007123	0.011067	0.010581	0.005640	0.009534	0.008627	0.007520
C-7	0.026268	0.041365	0.023163	0.041727	0.025263	0.021215	0.022673	0.064070	0.034352	0.071313	0.020441	0.030977	0.026268	0.041365	0.023163	0.041727	0.025263	0.021215
C-8	0.028001	0.039320	0.025408	0.042365	0.035060	0.049845	0.024047	0.053107	0.029749	0.044747	0.020218	0.037543	0.028001	0.039320	0.025408	0.042365	0.035060	0.049845
C-9	0.001581	0.001280	0.001419	0.001424	0.001533	0.001121	0.001076	0.001219	0.000573	0.001271	0.002238	0.001093	0.001581	0.001280	0.001419	0.001424	0.001533	0.001121
C-10	0.038047	0.050849	0.034547	0.054609	0.054037	0.051045	0.026300	0.069052	0.030937	0.038569	0.020450	0.041537	0.038047	0.050849	0.034547	0.054609	0.054037	0.051045
C-11	0.001821	0.002367	0.001595	0.001977	0.001667	0.001882	0.001701	0.002218	0.001939	0.001657	0.001521	0.001846	0.001821	0.002367	0.001595	0.001977	0.001667	0.001882
C-12	0.140102	0.180196	0.128463	0.201564	0.110697	0.165190	0.142756	0.203309	0.156348	0.198767	0.135729	0.183792	0.140102	0.180196	0.128463	0.201564	0.110697	0.165190
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.181270	0.259779	0.144424	0.180046	0.093747	0.124732	0.151948	0.197366	0.200408	0.122192	0.135980	0.164753	0.181270	0.259779	0.144424	0.180046	0.093747	0.124732
C-15	0.046973	0.047830	0.052378	0.054739	0.063545	0.047455	0.061583	0.054014	0.043649	0.045611	0.050042	0.057255	0.046973	0.047830	0.052378	0.054739	0.063545	0.047455
C-16	0.006277	0.005833	0.005860	0.005363	0.008938	0.006158	0.003149	0.006030	0.004301	0.004593	0.008881	0.003541	0.006277	0.005833	0.005860	0.005363	0.008938	0.006158
C-17	0.009419	0.012790	0.008477	0.013441	0.012496	0.020848	0.009065	0.015825	0.010878	0.014914	0.008092	0.012545	0.009419	0.012790	0.008477	0.013441	0.012496	0.020848
C-18	0.022132	0.022907	0.024081	0.025894	0.064501	0.052919	0.024927	0.038651	0.026991	0.030205	0.020721	0.027861	0.022132	0.022907	0.024081	0.025894	0.064501	0.052919
C-19	0.093570	0.112336	0.084197	0.096793	0.077649	0.086638	0.086689	0.102572	0.098481	0.080482	0.081126	0.093049	0.093570	0.112336	0.084197	0.096793	0.077649	0.086638
C-20	0.037586	0.043952	0.033627	0.043271	0.036897	0.046193	0.039115	0.042745	0.062640	0.036672	0.030064	0.058523	0.037586	0.043952	0.033627	0.043271	0.036897	0.046193
C-21	0.030081	0.028057	0.029117	0.026455	0.040392	0.029816	0.018472	0.029355	0.027664	0.023414	0.039888	0.020220	0.030081	0.028057	0.029117	0.026455	0.040392	0.029816
C-22	0.101974	0.122966	0.090001	0.125813	0.103888	0.141718	0.097526	0.142181	0.102361	0.131088	0.086698	0.112256	0.101974	0.122966	0.090001	0.125813	0.103888	0.141718
C-23	0.283341	0.259415	0.270734	0.284476	0.264856	0.295590	0.285001	0.276235	0.370193	0.272429	0.257683	0.309762	0.283341	0.259415	0.270734	0.284476	0.264856	0.295590
C-24	0.085198	0.062955	0.079283	0.066040	0.070504	0.054832	0.073599	0.054500	0.030668	0.049495	0.040717	0.077554	0.085198	0.062955	0.079283	0.066040	0.070504	0.054832
C-25	0.079616	0.079214	0.091942	0.108461	0.073227	0.099841	0.087985	0.087959	0.093176	0.103669	0.099533	0.121897	0.079616	0.079214	0.091942	0.108461	0.073227	0.099841
C-26	0.009647	0.010746	0.024019	0.011780	0.017549	0.016886	0.022173	0.021236	0.100008	0.018754	0.014330	0.017436	0.009647	0.010746	0.024019	0.011780	0.017549	0.016886
C-27	0.047773	0.056192	0.063813	0.046786	0.040637	0.045919	0.054093	0.049304	0.058205	0.047003	0.071193	0.053003	0.047773	0.056192	0.063813	0.046786	0.040637	0.045919
Ld-BL	0.034243	0.046998	0.030724	0.049532	0.035997	0.056882	0.032638	0.058655	0.039561	0.055388	0.029159	0.046123	0.034243	0.046998	0.030724	0.049532	0.035997	0.056882
Ld-BS	0.060752	0.083126	0.054385	0.087766	0.061961	0.098608	0.057871	0.102946	0.070073	0.097337	0.052122	0.081447	0.060752	0.083126	0.054385	0.087766	0.061961	0.098608
Ld-CL	0.009319	0.012851	0.008422	0.013379	0.010457	0.016314	0.008734	0.016253	0.010783	0.015316	0.007894	0.012573	0.009319	0.012851	0.008422	0.013379	0.010457	0.016314
Ld-CS	0.020590	0.028229	0.018437	0.029693	0.021277	0.033852	0.019520	0.035052	0.023721	0.033133	0.017586	0.027605	0.020590	0.028229	0.018437	0.029693	0.021277	0.033852
Ld-TL	0.011440	0.015821	0.010286	0.016569	0.012277	0.019618	0.010846	0.019872	0.013259	0.018826	0.009670	0.015520	0.011440	0.015821	0.010286	0.016569	0.012277	0.019618
Ld-TS	0.032229	0.044093	0.029003	0.046529	0.032765	0.052103	0.030814	0.054350	0.037097	0.051584	0.027854	0.043313	0.032229	0.044093	0.029003	0.046529	0.032765	0.052103
Ld-HTL	0.001615	0.002242	0.001442	0.002334	0.001722	0.002774	0.001517	0.002815	0.001872	0.002653	0.001349	0.002179	0.001615	0.002242	0.001442	0.002334	0.001722	0.002774
Ld-HTS	0.006425	0.008877	0.005685	0.009349	0.006880	0.010967	0.006006	0.011287	0.007435	0.010510	0.005295	0.008627	0.006425	0.008877	0.005685	0.009349	0.006880	0.010967
Ld-LL	0.000236	0.000325	0.000211	0.000344	0.000257	0.000409	0.000220	0.000416	0.000275	0.000391	0.000199	0.000319	0.000236	0.000325	0.000211	0.000344	0.000257	0.000409
Ld-LS	0.001324	0.001794	0.001156	0.001885	0.001424	0.002164	0.001213	0.002273	0.001511	0.002061	0.001083	0.001711	0.001324	0.001794	0.001156	0.001885	0.001424	0.002164
Ld-OL	0.004359	0.006064	0.003927	0.006302	0.004844	0.007672	0.004087	0.007676	0.005024	0.007215	0.003637	0.005912	0.004359	0.006064	0.003927	0.006302	0.004844	0.007672
Ld-OS	0.004026	0.005393	0.003622	0.005672	0.004134	0.006293	0.003772	0.006597	0.004597	0.006194	0.003562	0.005248	0.004026	0.005393	0.003622	0.005672	0.004134	0.006293
Ld-LSO	0.002821	0.003896	0.002520	0.004117	0.002888	0.004670	0.002695	0.004859	0.003260	0.004598	0.002383	0.003823	0.002821	0.003896	0.002520	0.004117	0.002888	0.004670
Lb-BL	0.015200	0.017381	0.013398	0.016086	0.012981	0.015204	0.014187	0.017035	0.015556	0.014320	0.012907	0.015091	0.015200	0.017381	0.013398	0.016086	0.012981	0.015204
Lb-BS	0.071461	0.088469	0.065534	0.079183	0.062502	0.074349	0.068153	0.084529	0.079246	0.070044	0.063681	0.074935	0.071461	0.088469	0.065534	0.079183	0.062502	0.074349
Lb-CL	0.006256	0.006958	0.006577	0.007003	0.005893	0.006647	0.006357	0.006987	0.006738	0.006292	0.006024	0.006765	0.006256	0.006958	0.006577	0.007003	0.005893	0.006647
Lb-CS	0.029464	0.035207	0.027240	0.034500	0.027094	0.032267	0.028714	0.035511	0.031488	0.030384	0.026347	0.031303	0.029464	0.035207	0.027240	0.034500	0.027094	0.032267
Lb-TL	0.007616	0.009069	0.007266	0.009294	0.009455	0.009942	0.007583	0.010094	0.008374	0.009256	0.007069	0.008945	0.007616	0.009069	0.007266	0.009294	0.009455	0.009942

	K-BL	K-BS	K-CL	K-CS	K-TL	K-TS	K-HTL	K-HTS	K-LL	K-LS	K-OL	K-OS	B-L	B-S	C-L	C-S	T-L	T-S
	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198
Lb-TS	0.055338	0.065280	0.053540	0.065304	0.057670	0.069884	0.055731	0.071449	0.068177	0.063513	0.051322	0.062923	0.055338	0.065280	0.053540	0.065304	0.057670	0.069884
Lb-HTL	0.000842	0.000964	0.000835	0.001012	0.000754	0.000956	0.002945	0.000983	0.000933	0.000930	0.000849	0.001037	0.000842	0.000964	0.000835	0.001012	0.000754	0.000956
Lb-HTS	0.032972	0.038892	0.031384	0.037076	0.034414	0.038404	0.033150	0.042406	0.039652	0.034681	0.029570	0.035126	0.032972	0.038892	0.031384	0.037076	0.034414	0.038404
Lb-LL	0.000284	0.000314	0.000281	0.000326	0.000280	0.000316	0.000295	0.000325	0.006170	0.000298	0.000281	0.000316	0.000284	0.000314	0.000281	0.000326	0.000280	0.000316
Lb-LS	0.011179	0.012333	0.011124	0.013135	0.010871	0.012724	0.011546	0.013015	0.012099	0.014153	0.011042	0.012877	0.011179	0.012333	0.011124	0.013135	0.010871	0.012724
Lb-OL	0.002512	0.002589	0.002508	0.002650	0.002622	0.002526	0.002793	0.002644	0.002632	0.002342	0.003052	0.002366	0.002512	0.002589	0.002508	0.002650	0.002622	0.002526
Lb-OS	0.007344	0.008686	0.006847	0.008298	0.006796	0.008001	0.007110	0.008761	0.007868	0.007548	0.006737	0.009114	0.007344	0.008686	0.006847	0.008298	0.006796	0.008001
Lb-HRD	0.087907	0.107520	0.080929	0.109249	0.087648	0.119780	0.081999	0.123818	0.100453	0.113924	0.078240	0.104327	0.087907	0.107520	0.080929	0.109249	0.087648	0.119780
K-BL	1.026658	0.033175	0.024766	0.032254	0.032325	0.037908	0.025756	0.037710	0.030125	0.032567	0.023546	0.031339	0.026658	0.033175	0.024766	0.032254	0.032325	0.037908
K-BS	0.052670	1.069581	0.046069	0.057317	0.041228	0.050300	0.047642	0.063077	0.059970	0.047638	0.044740	0.054037	0.052670	1.069581	0.046069	0.057317	0.041228	0.050300
K-CL	0.011282	0.013005	0.011422	0.014368	0.013791	0.016652	0.011287	0.015441	0.013091	0.014837	0.011475	0.014804	0.011282	0.013005	0.011422	0.014368	0.013791	0.016652
K-CS	0.010539	0.013238	0.009576	0.012460	0.010069	0.012619	0.009680	0.013814	0.011679	0.011840	0.009591	0.011869	0.010539	0.013238	0.009576	0.012460	0.010069	0.012619
K-TL	0.005366	0.006202	0.005381	0.006758	0.007981	0.008732	0.005397	0.007816	0.006175	0.007118	0.005301	0.006838	0.005366	0.006202	0.005381	0.006758	0.007981	0.008732
K-TS	0.018649	0.022183	0.019411	0.022973	0.023893	0.027240	0.019453	0.027027	0.030678	0.024118	0.018235	0.022921	0.018649	0.022183	0.019411	0.022973	0.023893	0.027240
K-HTL	0.001180	0.001392	0.001168	0.001456	0.001090	0.001398	0.001154	0.001449	0.001317	0.001361	0.001213	0.001471	0.001180	0.001392	0.001168	0.001456	0.001090	0.001398
K-HTS	0.009717	0.011033	0.011078	0.011268	0.013423	0.013542	0.010982	0.013397	0.020136	0.011517	0.009959	0.011934	0.009717	0.011033	0.011078	0.011268	0.013423	0.013542
K-LL	0.000429	0.000495	0.000425	0.000506	0.000387	0.000463	0.000422	0.000487	1.000482	0.000446	0.000444	0.000524	0.000429	0.000495	0.000425	0.000506	0.000387	0.000463
K-LS	0.003270	0.003592	0.003382	0.003957	0.003028	0.003632	0.003344	0.003663	0.003603	1.003573	0.003540	0.004138	0.003270	0.003592	0.003382	0.003957	0.003028	0.003632
K-OL	0.007257	0.008752	0.006786	0.009032	0.008884	0.011064	0.007110	0.010533	0.008016	0.009705	1.006432	0.008710	0.007257	0.008752	0.006786	0.009032	0.008884	0.011064
K-OS	0.005897	0.006880	0.005692	0.006790	0.005411	0.006333	0.005612	0.006806	0.006419	0.006035	0.005944	1.006734	0.005897	0.006880	0.005692	0.006790	0.005411	0.006333
B-L	1.086705	0.106626	0.078999	0.105424	0.089038	0.116662	0.086896	0.120803	0.095221	0.109447	0.074977	0.102797	1.086705	0.106626	0.078999	0.105424	0.089038	0.116662
B-S	0.217595	1.272211	0.196237	0.251320	0.191643	0.249552	0.217305	0.278751	0.235720	0.240262	0.194036	0.242014	0.217595	1.272211	0.196237	0.251320	0.191643	0.249552
C-L	0.032601	0.038439	1.031727	0.039764	0.034694	0.044560	0.034017	0.044007	0.035513	0.041369	0.030992	0.039993	0.032601	0.038439	1.031727	0.039764	0.034694	0.044560
C-S	0.082374	0.097555	0.075059	1.094673	0.075814	0.096505	0.088114	0.103320	0.081765	0.091575	0.077971	0.091081	0.082374	0.097555	0.075059	1.094673	0.075814	0.096505
T-L	0.027986	0.033961	0.026202	0.034759	1.032153	0.040094	0.029471	0.039805	0.029765	0.036867	0.026165	0.034239	0.027986	0.033961	0.026202	0.034759	1.032153	0.040094
T-S	0.145008	0.172439	0.137371	0.172688	0.148052	1.188499	0.153507	0.194075	0.168742	0.175755	0.137802	0.168836	0.145008	0.172439	0.137371	0.172688	0.148052	1.188499
HT-L	0.005419	0.006100	0.005134	0.006026	0.004848	0.006198	1.008090	0.006440	0.005687	0.006076	0.005059	0.006362	0.005419	0.006100	0.005134	0.006026	0.004848	0.006198
HT-S	0.068221	0.078672	0.065585	0.075936	0.071132	0.081708	0.073974	1.086866	0.082940	0.074154	0.064937	0.074977	0.068221	0.078672	0.065585	0.075936	0.071132	0.081708
Lo-L	0.001440	0.001515	0.001356	0.001440	0.001248	0.001403	0.001781	0.001471	1.007081	0.001306	0.001572	0.001522	0.001440	0.001515	0.001356	0.001440	0.001248	0.001403
Lo-S	0.030155	0.033043	0.028803	0.033357	0.027989	0.033528	0.033121	0.034674	0.029482	1.033684	0.030562	0.033580	0.030155	0.033043	0.028803	0.033357	0.027989	0.033528
O-L	0.017345	0.020436	0.016278	0.020693	0.018860	0.023844	0.018020	0.023660	0.019007	0.022006	1.015800	0.020358	0.017345	0.020436	0.016278	0.020693	0.018860	0.023844
O-S	0.034261	0.037094	0.031616	0.034579	0.029779	0.034166	0.040269	0.036626	0.030309	0.032125	0.035393	1.036811	0.034261	0.037094	0.031616	0.034579	0.029779	0.034166
COM	0.061406	0.056662	0.063613	0.061121	0.070702	0.058297	0.073867	0.059419	0.062743	0.052981	0.057893	0.050706	0.061406	0.056662	0.063613	0.061121	0.070702	0.058297
FA1	0.161210	0.124960	0.144045	0.085604	0.105984	0.069555	0.279603	0.078822	0.047473	0.054429	0.215488	0.118340	0.161210	0.124960	0.144045	0.085604	0.105984	0.069555
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235	0.125561	0.035397	0.021319	0.024443	0.096770	0.053143	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235
FA4	0.139875	0.139976	0.169737	0.121960	0.109740	0.083457	0.241207	0.097627	0.100305	0.156623	0.124838	0.135446	0.139875	0.139976	0.169737	0.121960	0.109740	0.083457
FA5	0.035599	0.031654	0.035080	0.028281	0.027095	0.025464	0.041126	0.028154	0.045390	0.029834	0.023017	0.038499	0.035599	0.031654	0.035080	0.028281	0.027095	0.025464
FA6	0.042126	0.039056	0.023599	0.025615	0.016904	0.021233	0.021091	0.021058	0.018663	0.030094	0.014451	0.023093	0.042126	0.039056	0.023599	0.025615	0.016904	0.021233
FA7	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235	0.125561	0.035397	0.021319	0.024443	0.096770	0.053143	0.072394	0.056116	0.064686	0.038442	0.047594	0.031235
FA8	0.216571	0.201259	0.202173	0.185028	0.308398	0.212474	0.108647	0.208054	0.148406	0.158460	0.306419	0.122177	0.216571	0.201259	0.202173	0.185028	0.308398	0.212474
FA9	0.005916	0.005459	0.006129	0.005889	0.006812	0.005616	0.007117	0.005725	0.006045	0.005104	0.005578	0.004885	0.005916	0.005459	0.006129	0.005889	0.006812	0.005616

	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	COM	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9
	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214
A1-BL	0.069366	0.125312	0.083974	0.118793	0.061326	0.098567	0.051955	0.054852	0.041998	0.103881	0.000000	0.066625	0.000000	0.103881	0.014888	0.000000
A2-BL	0.026160	0.032885	0.032039	0.021708	0.023451	0.028057	0.014692	0.016397	0.014077	0.029458	0.000000	0.024414	0.000000	0.029458	0.005752	0.000000
A3-BL	0.006704	0.010395	0.007259	0.008124	0.005573	0.007493	0.004380	0.004646	0.003633	0.008942	0.000000	0.005444	0.000000	0.008942	0.001144	0.000000
A5-BL	0.002589	0.003688	0.003834	0.002977	0.004370	0.003076	0.001924	0.007560	0.008305	0.003575	0.000000	0.002826	0.000000	0.003575	0.010808	0.000000
A6-BL	0.000508	0.000600	0.000584	0.000472	0.000473	0.000552	0.000300	0.000363	0.000326	0.000557	0.000000	0.000440	0.000000	0.000557	0.000204	0.000000
A7-BL	0.000492	0.000583	0.000559	0.000457	0.000461	0.000529	0.000292	0.000354	0.000319	0.000540	0.000000	0.000427	0.000000	0.000540	0.000202	0.000000
A8-BL	0.001534	0.001922	0.001965	0.001533	0.001784	0.001751	0.000976	0.002165	0.002227	0.001825	0.000000	0.001432	0.000000	0.001825	0.002442	0.000000
A9-BL	0.063000	0.130171	0.080882	0.136594	0.054734	0.100659	0.052514	0.056242	0.041253	0.107521	0.000000	0.063015	0.000000	0.107521	0.014444	0.000000
A10-BL	0.012045	0.017692	0.012715	0.016312	0.010795	0.013953	0.011701	0.008616	0.006986	0.015443	0.000000	0.010656	0.000000	0.015443	0.003052	0.000000
A11-BL	0.003820	0.003819	0.004045	0.004501	0.004321	0.005292	0.002512	0.002161	0.001726	0.004178	0.000000	0.002917	0.000000	0.004178	0.000517	0.000000
A12-BL	0.005417	0.006410	0.006154	0.005030	0.005070	0.005815	0.003213	0.003892	0.003510	0.005938	0.000000	0.004699	0.000000	0.005938	0.002223	0.000000
A1-BS	0.114280	0.204151	0.137815	0.193515	0.101245	0.161386	0.084717	0.089392	0.068518	0.169445	0.000000	0.109090	0.000000	0.169445	0.024140	0.000000
A2-BS	0.090881	0.113561	0.110986	0.074625	0.081499	0.097089	0.050742	0.056847	0.048943	0.101743	0.000000	0.084597	0.000000	0.101743	0.020252	0.000000
A3-BS	0.000702	0.001089	0.000761	0.000851	0.000584	0.000785	0.000459	0.000487	0.000381	0.000937	0.000000	0.000570	0.000000	0.000937	0.000120	0.000000
A5-BS	0.006450	0.009183	0.009552	0.007415	0.010875	0.007664	0.004791	0.018805	0.020656	0.008903	0.000000	0.007037	0.000000	0.008903	0.026877	0.000000
A6-BS	0.001524	0.001799	0.001753	0.001415	0.001418	0.001655	0.000901	0.001089	0.000979	0.001672	0.000000	0.001319	0.000000	0.001672	0.000613	0.000000
A7-BS	0.001724	0.002040	0.001958	0.001600	0.001613	0.001850	0.001022	0.001238	0.001117	0.001890	0.000000	0.001495	0.000000	0.001890	0.000707	0.000000
A8-BS	0.005411	0.006721	0.006726	0.005336	0.006081	0.006056	0.003406	0.006941	0.007051	0.006338	0.000000	0.004993	0.000000	0.006338	0.007433	0.000000
A10-BS	0.020830	0.030818	0.022118	0.028377	0.019012	0.024240	0.020136	0.015928	0.013240	0.026959	0.000000	0.018586	0.000000	0.026959	0.006936	0.000000
A11-BS	0.007709	0.007707	0.008164	0.009084	0.008721	0.010681	0.005070	0.004361	0.003483	0.008433	0.000000	0.005887	0.000000	0.008433	0.001043	0.000000
A12-BS	0.019404	0.022960	0.022044	0.018015	0.018159	0.020828	0.011507	0.013939	0.012571	0.021271	0.000000	0.016830	0.000000	0.021271	0.007963	0.000000
A13-BS	0.003471	0.003324	0.015653	0.002935	0.002243	0.002729	0.005208	0.001281	0.001039	0.002480	0.000000	0.001624	0.000000	0.002480	0.000303	0.000000
A1-CL	0.017770	0.033535	0.021848	0.031866	0.015580	0.025918	0.013864	0.014668	0.011181	0.027685	0.000000	0.017480	0.000000	0.027685	0.004059	0.000000
A2-CL	0.007238	0.009398	0.009265	0.006084	0.006550	0.007878	0.004189	0.004680	0.004019	0.008384	0.000000	0.006989	0.000000	0.008384	0.001660	0.000000
A3-CL	0.002490	0.003861	0.002696	0.003017	0.002070	0.002783	0.001627	0.001726	0.001350	0.003321	0.000000	0.002022	0.000000	0.003321	0.000425	0.000000
A5-CL	0.001978	0.002813	0.002921	0.002270	0.003325	0.002346	0.001467	0.005735	0.006297	0.002725	0.000000	0.002155	0.000000	0.002725	0.008188	0.000000
A6-CL	0.000111	0.000131	0.000130	0.000103	0.000103	0.000123	0.000065	0.000079	0.000071	0.000122	0.000000	0.000096	0.000000	0.000122	0.000044	0.000000
A7-CL	0.000394	0.000466	0.000448	0.000366	0.000369	0.000423	0.000234	0.000283	0.000255	0.000432	0.000000	0.000342	0.000000	0.000432	0.000162	0.000000
A8-CL	0.000927	0.001156	0.001190	0.000923	0.001063	0.001064	0.000586	0.001270	0.001301	0.001099	0.000000	0.000860	0.000000	0.001099	0.001410	0.000000
A9-CL	0.031231	0.064706	0.040149	0.067942	0.027140	0.049851	0.026042	0.027879	0.020456	0.053297	0.000000	0.031259	0.000000	0.053297	0.007161	0.000000
A10-CL	0.002743	0.004055	0.002910	0.003737	0.002481	0.003194	0.002650	0.002038	0.001673	0.003546	0.000000	0.002441	0.000000	0.003546	0.000809	0.000000
A11-CL	0.006390	0.006388	0.006767	0.007529	0.007228	0.008853	0.004202	0.003615	0.002887	0.006989	0.000000	0.004880	0.000000	0.006989	0.000864	0.000000
A12-CL	0.002098	0.002482	0.002383	0.001948	0.001963	0.002252	0.001244	0.001507	0.001359	0.002300	0.000000	0.001820	0.000000	0.002300	0.000861	0.000000
A1-CS	0.042242	0.076222	0.051102	0.072247	0.037351	0.059969	0.031626	0.033386	0.025573	0.063213	0.000000	0.040571	0.000000	0.063213	0.009073	0.000000
A2-CS	0.022975	0.028004	0.026962	0.018793	0.020731	0.024251	0.012554	0.014822	0.013007	0.025205	0.000000	0.020825	0.000000	0.025205	0.006359	0.000000
A3-CS	0.000255	0.000396	0.000277	0.000309	0.000212	0.000285	0.000167	0.000177	0.000138	0.000341	0.000000	0.000207	0.000000	0.000341	0.000044	0.000000
A5-CS	0.002589	0.003688	0.003834	0.002977	0.004370	0.003076	0.001924	0.007560	0.008305	0.003575	0.000000	0.002826	0.000000	0.003575	0.010808	0.000000
A6-CS	0.000368	0.000433	0.000429	0.000342	0.000340	0.000405	0.000217	0.000261	0.000234	0.000404	0.000000	0.000318	0.000000	0.000404	0.000145	0.000000
A7-CS	0.000985	0.001165	0.001119	0.000914	0.000922	0.001057	0.000584	0.000708	0.000638	0.001080	0.000000	0.000854	0.000000	0.001080	0.000404	0.000000
A8-CS	0.002673	0.003257	0.003331	0.002593	0.002825	0.003039	0.001641	0.002964	0.002937	0.003080	0.000000	0.002410	0.000000	0.003080	0.002869	0.000000
A10-CS	0.007713	0.011379	0.008172	0.010480	0.007007	0.008956	0.007473	0.005795	0.004790	0.009947	0.000000	0.006864	0.000000	0.009947	0.002410	0.000000
A11-CS	0.003056	0.003055	0.003236	0.003601	0.003457	0.004234	0.002010	0.001729	0.001381	0.003343	0.000000	0.002334	0.000000	0.003343	0.000413	0.000000
A12-CS	0.007732	0.009149	0.008784	0.007179	0.007236	0.008299	0.004585	0.005554	0.005009	0.008476	0.000000	0.006706	0.000000	0.008476	0.003173	0.000000

	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	COM	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9
	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214
A1-TL	0.022489	0.041483	0.027459	0.039421	0.019785	0.032354	0.017199	0.018176	0.013887	0.034341	0.000000	0.021850	0.000000	0.034341	0.005000	0.000000
A2-TL	0.003316	0.003819	0.003498	0.002732	0.003063	0.003410	0.001729	0.002380	0.002190	0.003482	0.000000	0.002813	0.000000	0.003482	0.001483	0.000000
A3-TL	0.002011	0.003119	0.002178	0.002437	0.001672	0.002248	0.001314	0.001394	0.001090	0.002683	0.000000	0.001633	0.000000	0.002683	0.000343	0.000000
A4-TL	0.000402	0.000624	0.000436	0.000487	0.000334	0.000450	0.000263	0.000279	0.000218	0.000537	0.000000	0.000327	0.000000	0.000537	0.000069	0.000000
A5-TL	0.000964	0.001377	0.001432	0.001112	0.001639	0.001146	0.000719	0.002850	0.003133	0.001336	0.000000	0.001056	0.000000	0.001336	0.004084	0.000000
A6-TL	0.000057	0.000067	0.000068	0.000053	0.000052	0.000064	0.000033	0.000040	0.000036	0.000063	0.000000	0.000049	0.000000	0.000063	0.000021	0.000000
A7-TL	0.000098	0.000117	0.000112	0.000091	0.000092	0.000106	0.000058	0.000071	0.000064	0.000108	0.000000	0.000085	0.000000	0.000108	0.000040	0.000000
A8-TL	0.000738	0.000895	0.000942	0.000717	0.000775	0.000859	0.000451	0.000822	0.000814	0.000853	0.000000	0.000663	0.000000	0.000853	0.000797	0.000000
A9-TL	0.030493	0.062621	0.039031	0.065622	0.026475	0.048843	0.025402	0.027231	0.019957	0.052065	0.000000	0.030455	0.000000	0.052065	0.006989	0.000000
A10-TL	0.004525	0.006636	0.004771	0.006118	0.004050	0.005234	0.004402	0.003220	0.002607	0.005790	0.000000	0.003999	0.000000	0.005790	0.001124	0.000000
A11-TL	0.002848	0.002847	0.003016	0.003355	0.003221	0.003945	0.001873	0.001611	0.001287	0.003115	0.000000	0.002175	0.000000	0.003115	0.000385	0.000000
A12-TL	0.001330	0.001573	0.001511	0.001235	0.001244	0.001427	0.000789	0.000955	0.000861	0.001458	0.000000	0.001153	0.000000	0.001458	0.000546	0.000000
A1-TS	0.066544	0.117898	0.079851	0.112199	0.059294	0.093889	0.049166	0.051852	0.039790	0.098215	0.000000	0.063364	0.000000	0.098215	0.014060	0.000000
A2-TS	0.024581	0.027197	0.024939	0.019587	0.021735	0.024903	0.012305	0.014938	0.013223	0.024847	0.000000	0.020044	0.000000	0.024847	0.006861	0.000000
A3-TS	0.001213	0.001881	0.001314	0.001470	0.001008	0.001356	0.000793	0.000841	0.000657	0.001618	0.000000	0.000985	0.000000	0.001618	0.000207	0.000000
A4-TS	0.003754	0.005821	0.004065	0.004549	0.003121	0.004196	0.002453	0.002602	0.002035	0.005008	0.000000	0.003049	0.000000	0.005008	0.000641	0.000000
A5-TS	0.003110	0.004418	0.004612	0.003570	0.005219	0.003707	0.002304	0.009008	0.009889	0.004287	0.000000	0.003385	0.000000	0.004287	0.012856	0.000000
A6-TS	0.001770	0.002090	0.002032	0.001644	0.001649	0.001920	0.001047	0.001265	0.001138	0.001942	0.000000	0.001532	0.000000	0.001942	0.000714	0.000000
A7-TS	0.001970	0.002331	0.002238	0.001829	0.001844	0.002115	0.001168	0.001415	0.001276	0.002159	0.000000	0.001709	0.000000	0.002159	0.000808	0.000000
A8-TS	0.006667	0.008135	0.008300	0.006474	0.007081	0.007565	0.004102	0.007481	0.007431	0.007691	0.000000	0.006022	0.000000	0.007691	0.007310	0.000000
A10-TS	0.022000	0.032416	0.023291	0.029834	0.020072	0.025495	0.021352	0.016730	0.013919	0.028329	0.000000	0.019585	0.000000	0.028329	0.007276	0.000000
A11-TS	0.007571	0.007568	0.008017	0.008920	0.008564	0.010488	0.004979	0.004283	0.003420	0.008281	0.000000	0.005781	0.000000	0.008281	0.001024	0.000000
A12-TS	0.007141	0.008450	0.008113	0.006630	0.006683	0.007665	0.004235	0.005130	0.004626	0.007828	0.000000	0.006194	0.000000	0.007828	0.002930	0.000000
A13-TS	0.011653	0.011160	0.052556	0.009856	0.007530	0.009163	0.017484	0.004299	0.003489	0.008325	0.000000	0.005452	0.000000	0.008325	0.001018	0.000000
A1-HTL	0.003174	0.005923	0.003900	0.005597	0.002769	0.004578	0.002448	0.002588	0.001976	0.004886	0.000000	0.003101	0.000000	0.004886	0.000715	0.000000
A2-HTL	0.001063	0.001275	0.001214	0.000868	0.000968	0.001112	0.000573	0.000714	0.000639	0.001151	0.000000	0.000948	0.000000	0.001151	0.000358	0.000000
A5-HTL	0.000207	0.000296	0.000306	0.000239	0.000352	0.000244	0.000154	0.000611	0.000672	0.000286	0.000000	0.000227	0.000000	0.000286	0.000876	0.000000
A6-HTL	0.000040	0.000046	0.000053	0.000037	0.000035	0.000050	0.000023	0.000027	0.000023	0.000045	0.000000	0.000034	0.000000	0.000045	0.000012	0.000000
A7-HTL	0.000015	0.000017	0.000017	0.000014	0.000014	0.000016	0.000009	0.000011	0.000010	0.000016	0.000000	0.000013	0.000000	0.000016	0.000006	0.000000
A8-HTL	0.000088	0.000100	0.000118	0.000082	0.000076	0.000111	0.000050	0.000058	0.000050	0.000098	0.000000	0.000074	0.000000	0.000098	0.000026	0.000000
A10-HTL	0.000446	0.000662	0.000475	0.000608	0.000418	0.000518	0.000432	0.000370	0.000318	0.000580	0.000000	0.000401	0.000000	0.000580	0.000200	0.000000
A11-HTL	0.001042	0.001042	0.001103	0.001228	0.001179	0.001443	0.000685	0.000589	0.000471	0.001140	0.000000	0.000796	0.000000	0.001140	0.000141	0.000000
A12-HTL	0.000182	0.000216	0.000207	0.000169	0.000171	0.000196	0.000108	0.000131	0.000118	0.000200	0.000000	0.000158	0.000000	0.000200	0.000075	0.000000
A1-HTS	0.014449	0.027309	0.017827	0.025485	0.012521	0.020838	0.011122	0.011770	0.008968	0.022324	0.000000	0.014153	0.000000	0.022324	0.003168	0.000000
A2-HTS	0.020312	0.023001	0.021421	0.016233	0.017945	0.020784	0.010376	0.012224	0.010712	0.020923	0.000000	0.016999	0.000000	0.020923	0.005133	0.000000
A4-HTS	0.003518	0.005455	0.003809	0.004263	0.002924	0.003932	0.002298	0.002438	0.001907	0.004693	0.000000	0.002857	0.000000	0.004693	0.000601	0.000000
A5-HTS	0.000790	0.001119	0.001167	0.000904	0.001316	0.000940	0.000583	0.002261	0.002480	0.001085	0.000000	0.000857	0.000000	0.001085	0.003219	0.000000
A6-HTS	0.001016	0.001199	0.001168	0.000943	0.000946	0.001103	0.000600	0.000726	0.000653	0.001115	0.000000	0.000879	0.000000	0.001115	0.000409	0.000000
A7-HTS	0.000591	0.000699	0.000671	0.000549	0.000553	0.000634	0.000350	0.000425	0.000383	0.000648	0.000000	0.000513	0.000000	0.000648	0.000243	0.000000
A8-HTS	0.004318	0.005233	0.005269	0.004152	0.004462	0.004840	0.002635	0.004448	0.004354	0.004925	0.000000	0.003865	0.000000	0.004925	0.004059	0.000000
A10-HTS	0.011243	0.016552	0.011894	0.015236	0.010231	0.013023	0.010918	0.008471	0.007023	0.014461	0.000000	0.009998	0.000000	0.014461	0.003588	0.000000
A11-HTS	0.002500	0.002500	0.002648	0.002946	0.002829	0.003464	0.001644	0.001414	0.001130	0.002735	0.000000	0.001909	0.000000	0.002735	0.000338	0.000000
A12-HTS	0.006255	0.007401	0.007105	0.005807	0.005853	0.006714	0.003709	0.004493	0.004052	0.006856	0.000000	0.005425	0.000000	0.006856	0.002567	0.000000



	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	COM	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9
	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214
A13-HTS	0.003982	0.003814	0.017960	0.003368	0.002573	0.003131	0.005975	0.001469	0.001192	0.002845	0.000000	0.001863	0.000000	0.002845	0.000348	0.000000
A1-LL	0.000447	0.000854	0.000553	0.000807	0.000387	0.000654	0.000347	0.000368	0.000279	0.000699	0.000000	0.000438	0.000000	0.000699	0.000098	0.000000
A2-LL	0.000325	0.000390	0.000367	0.000270	0.000304	0.000340	0.000176	0.000241	0.000222	0.000354	0.000000	0.000289	0.000000	0.000354	0.000149	0.000000
A5-LL	0.000066	0.000095	0.000098	0.000076	0.000114	0.000078	0.000050	0.000201	0.000222	0.000092	0.000000	0.000073	0.000000	0.000092	0.000291	0.000000
A6-LL	0.000025	0.000029	0.000036	0.000024	0.000021	0.000034	0.000014	0.000016	0.000014	0.000028	0.000000	0.000021	0.000000	0.000028	0.000006	0.000000
A7-LL	0.000010	0.000012	0.000011	0.000009	0.000009	0.000011	0.000006	0.000007	0.000006	0.000011	0.000000	0.000009	0.000000	0.000011	0.000004	0.000000
A8-LL	0.000063	0.000071	0.000090	0.000059	0.000053	0.000084	0.000035	0.000040	0.000034	0.000071	0.000000	0.000052	0.000000	0.000071	0.000016	0.000000
A10-LL	0.000154	0.000233	0.000167	0.000212	0.000158	0.000180	0.000148	0.000167	0.000156	0.000205	0.000000	0.000144	0.000000	0.000205	0.000136	0.000000
A11-LL	0.000417	0.000417	0.000441	0.000491	0.000471	0.000577	0.000274	0.000236	0.000188	0.000456	0.000000	0.000318	0.000000	0.000456	0.000056	0.000000
A12-LL	0.000049	0.000058	0.000056	0.000046	0.000046	0.000053	0.000029	0.000035	0.000032	0.000054	0.000000	0.000043	0.000000	0.000054	0.000020	0.000000
A1-LS	0.003667	0.006961	0.004536	0.006338	0.003143	0.005219	0.002805	0.002967	0.002266	0.005639	0.000000	0.003600	0.000000	0.005639	0.000789	0.000000
A2-LS	0.004016	0.004460	0.004046	0.003248	0.003596	0.004075	0.002021	0.002580	0.002319	0.004080	0.000000	0.003273	0.000000	0.004080	0.001357	0.000000
A5-LS	0.000338	0.000485	0.000502	0.000391	0.000581	0.000400	0.000253	0.001014	0.001116	0.000470	0.000000	0.000372	0.000000	0.000470	0.001457	0.000000
A6-LS	0.000402	0.000475	0.000460	0.000373	0.000375	0.000434	0.000238	0.000288	0.000259	0.000441	0.000000	0.000348	0.000000	0.000441	0.000163	0.000000
A7-LS	0.000295	0.000350	0.000336	0.000274	0.000277	0.000317	0.000175	0.000212	0.000191	0.000324	0.000000	0.000256	0.000000	0.000324	0.000121	0.000000
A8-LS	0.001808	0.002154	0.002088	0.001694	0.001741	0.001958	0.001081	0.001450	0.001346	0.002002	0.000000	0.001582	0.000000	0.002002	0.000999	0.000000
A10-LS	0.002087	0.003085	0.002215	0.002838	0.001917	0.002424	0.002021	0.001628	0.001366	0.002698	0.000000	0.001864	0.000000	0.002698	0.000755	0.000000
A11-LS	0.005834	0.005832	0.006178	0.006874	0.006600	0.008083	0.003837	0.003300	0.002636	0.006381	0.000000	0.004455	0.000000	0.006381	0.000789	0.000000
A12-LS	0.000704	0.000833	0.000800	0.000654	0.000659	0.000756	0.000418	0.000506	0.000456	0.000772	0.000000	0.000611	0.000000	0.000772	0.000289	0.000000
A1-OL	0.008336	0.015826	0.010244	0.014975	0.007338	0.012182	0.006534	0.006913	0.005272	0.013046	0.000000	0.008239	0.000000	0.013046	0.001915	0.000000
A2-OL	0.002493	0.003135	0.003063	0.002060	0.002244	0.002671	0.001401	0.001584	0.001368	0.002808	0.000000	0.002333	0.000000	0.002808	0.000586	0.000000
A3-OL	0.001405	0.002178	0.001521	0.001702	0.001168	0.001570	0.000918	0.000973	0.000761	0.001874	0.000000	0.001141	0.000000	0.001874	0.000240	0.000000
A5-OL	0.000338	0.000485	0.000502	0.000391	0.000581	0.000400	0.000253	0.001014	0.001116	0.000470	0.000000	0.000372	0.000000	0.000470	0.001457	0.000000
A6-OL	0.000072	0.000084	0.000085	0.000067	0.000066	0.000080	0.000042	0.000051	0.000045	0.000079	0.000000	0.000062	0.000000	0.000079	0.000027	0.000000
A7-OL	0.000074	0.000087	0.000084	0.000069	0.000069	0.000079	0.000044	0.000053	0.000048	0.000081	0.000000	0.000064	0.000000	0.000081	0.000030	0.000000
A8-OL	0.000314	0.000460	0.000457	0.000369	0.000565	0.000358	0.000242	0.001002	0.001107	0.000442	0.000000	0.000354	0.000000	0.000442	0.001458	0.000000
A9-OL	0.039098	0.080599	0.050142	0.084527	0.033961	0.062507	0.032577	0.034901	0.025595	0.066722	0.000000	0.039085	0.000000	0.066722	0.008963	0.000000
A10-OL	0.006307	0.009212	0.006629	0.008491	0.005628	0.007269	0.006157	0.004421	0.003566	0.008029	0.000000	0.005557	0.000000	0.008029	0.001479	0.000000
A11-OL	0.000903	0.000903	0.000956	0.001064	0.001021	0.001251	0.000594	0.000511	0.000408	0.000988	0.000000	0.000690	0.000000	0.000988	0.000122	0.000000
A12-OL	0.000468	0.000554	0.000532	0.000434	0.000438	0.000502	0.000277	0.000336	0.000303	0.000513	0.000000	0.000406	0.000000	0.000513	0.000192	0.000000
A1-OS	0.007546	0.013442	0.009067	0.012762	0.006714	0.010658	0.005571	0.005878	0.004504	0.011161	0.000000	0.007190	0.000000	0.011161	0.001572	0.000000
A2-OS	0.007569	0.008987	0.008538	0.006158	0.006766	0.007905	0.004038	0.004737	0.004144	0.008120	0.000000	0.006658	0.000000	0.008120	0.001980	0.000000
A5-OS	0.001715	0.002454	0.002538	0.001980	0.002926	0.002028	0.001282	0.005088	0.005595	0.002377	0.000000	0.001882	0.000000	0.002377	0.007297	0.000000
A6-OS	0.000118	0.000138	0.000143	0.000110	0.000107	0.000135	0.000069	0.000082	0.000073	0.000130	0.000000	0.000101	0.000000	0.000130	0.000043	0.000000
A7-OS	0.000148	0.000175	0.000168	0.000137	0.000138	0.000159	0.000088	0.000106	0.000096	0.000162	0.000000	0.000128	0.000000	0.000162	0.000061	0.000000
A8-OS	0.000857	0.001044	0.001043	0.000827	0.000900	0.000955	0.000527	0.000918	0.000906	0.000981	0.000000	0.000772	0.000000	0.000981	0.000867	0.000000
A10-OS	0.003801	0.005614	0.004031	0.005171	0.003454	0.004419	0.003678	0.002862	0.002366	0.004909	0.000000	0.003385	0.000000	0.004909	0.001194	0.000000
A11-OS	0.002764	0.002763	0.002927	0.003257	0.003127	0.003830	0.001818	0.001564	0.001249	0.003024	0.000000	0.002111	0.000000	0.003024	0.000374	0.000000
A12-OS	0.002019	0.002389	0.002294	0.001875	0.001890	0.002167	0.001197	0.001450	0.001308	0.002213	0.000000	0.001751	0.000000	0.002213	0.000829	0.000000
A14	0.061238	0.138736	0.075981	0.115237	0.051115	0.096833	0.052989	0.056355	0.042856	0.107820	0.000000	0.067119	0.000000	0.107820	0.014405	0.000000
A15	0.412692	0.380038	0.459066	0.368927	0.369594	0.440319	0.195218	0.205783	0.172455	0.394269	0.000000	0.307945	0.000000	0.394269	0.052146	0.000000
C-1	0.177647	0.372131	0.226281	0.373657	0.153282	0.282705	0.148756	0.159084	0.117578	0.304120	0.000000	0.180590	0.000000	0.304120	0.040863	0.000000
C-2	0.054604	0.069677	0.062046	0.051953	0.049060	0.058971	0.035424	0.035903	0.030796	0.062224	0.000000	0.048935	0.000000	0.062224	0.014448	0.000000

	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	COM	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9
	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214
C-3	0.174013	0.358638	0.220500	0.381430	0.149774	0.295682	0.149505	0.161288	0.115676	0.310935	0.000000	0.174099	0.000000	0.310935	0.039309	0.000000
C-4	0.020590	0.025964	0.023794	0.018456	0.018424	0.022044	0.012321	0.013286	0.011423	0.023222	0.000000	0.018504	0.000000	0.023222	0.005187	0.000000
C-5	0.026669	0.061673	0.037570	0.053476	0.022911	0.042857	0.022923	0.024450	0.018018	0.046809	0.000000	0.027581	0.000000	0.046809	0.006225	0.000000
C-6	0.009091	0.009546	0.009878	0.009476	0.005148	0.007123	0.004430	0.004621	0.003878	0.008853	0.000000	0.007273	0.000000	0.008853	0.001172	0.000000
C-7	0.022673	0.064070	0.034352	0.071313	0.020441	0.030977	0.019654	0.019899	0.015317	0.037851	0.000000	0.024704	0.000000	0.037851	0.005266	0.000000
C-8	0.024047	0.053107	0.029749	0.044747	0.020218	0.037543	0.020460	0.021743	0.016547	0.041552	0.000000	0.025951	0.000000	0.041552	0.005595	0.000000
C-9	0.001076	0.001219	0.000573	0.001271	0.002238	0.001093	0.000665	0.000660	0.000580	0.001266	0.000000	0.001127	0.000000	0.001266	0.000166	0.000000
C-10	0.026300	0.069052	0.030937	0.038569	0.020450	0.041537	0.024346	0.025677	0.020456	0.049316	0.000000	0.033076	0.000000	0.049316	0.006409	0.000000
C-11	0.001701	0.002218	0.001939	0.001657	0.001521	0.001846	0.001109	0.001126	0.000958	0.001973	0.000000	0.001521	0.000000	0.001973	0.000436	0.000000
C-12	0.142756	0.203309	0.156348	0.198767	0.135729	0.183792	0.087990	0.091732	0.072017	0.176720	0.000000	0.122673	0.000000	0.176720	0.022457	0.000000
C-13	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
C-14	0.151948	0.197366	0.200408	0.122192	0.135980	0.164753	0.087652	0.091856	0.077408	0.175260	0.000000	0.149166	0.000000	0.175260	0.023871	0.000000
C-15	0.061583	0.054014	0.043649	0.045611	0.050042	0.057255	0.024928	0.026558	0.022330	0.051162	0.000000	0.038837	0.000000	0.051162	0.006503	0.000000
C-16	0.003149	0.006030	0.004301	0.004593	0.008881	0.003541	0.002960	0.018959	0.021457	0.005741	0.000000	0.004755	0.000000	0.005741	0.029733	0.000000
C-17	0.009065	0.015825	0.010878	0.014914	0.008092	0.012545	0.007143	0.007761	0.005922	0.014364	0.000000	0.008817	0.000000	0.014364	0.002379	0.000000
C-18	0.024927	0.038651	0.026991	0.030205	0.020721	0.027861	0.016285	0.017275	0.013509	0.033249	0.000000	0.020241	0.000000	0.033249	0.004255	0.000000
C-19	0.086689	0.102572	0.098481	0.080482	0.081126	0.093049	0.051409	0.062272	0.056160	0.095027	0.000000	0.075189	0.000000	0.095027	0.035573	0.000000
C-20	0.039115	0.042745	0.062640	0.036672	0.030064	0.058523	0.020681	0.023015	0.018332	0.044390	0.000000	0.031258	0.000000	0.044390	0.005593	0.000000
C-21	0.018472	0.029355	0.027664	0.023414	0.039888	0.020220	0.015678	0.076996	0.086250	0.028111	0.000000	0.022888	0.000000	0.028111	0.116843	0.000000
C-22	0.097526	0.142181	0.102361	0.131088	0.086698	0.112256	0.095348	0.067341	0.054013	0.123857	0.000000	0.085762	0.000000	0.123857	0.021275	0.000000
C-23	0.285001	0.276235	0.370193	0.272429	0.257683	0.309762	0.136759	0.145856	0.120033	0.280891	0.000000	0.212192	0.000000	0.280891	0.035787	0.000000
C-24	0.073599	0.054500	0.030668	0.049495	0.040717	0.077554	0.030451	0.032940	0.029166	0.063331	0.000000	0.053928	0.000000	0.063331	0.008168	0.000000
C-25	0.087985	0.087959	0.093176	0.103669	0.099533	0.121897	0.057864	0.049773	0.039750	0.096237	0.000000	0.067190	0.000000	0.096237	0.011900	0.000000
C-26	0.022173	0.021236	0.100008	0.018754	0.014330	0.017436	0.033271	0.008181	0.006640	0.015841	0.000000	0.010374	0.000000	0.015841	0.001937	0.000000
C-27	0.054093	0.049304	0.058205	0.047003	0.071193	0.053003	0.028008	0.026987	0.023256	0.050046	0.000000	0.041824	0.000000	0.050046	0.008192	0.000000
Ld-BL	0.032638	0.058655	0.039561	0.055388	0.029159	0.046123	0.024397	0.026620	0.020785	0.048733	0.000000	0.031332	0.000000	0.048733	0.008595	0.000000
Ld-BS	0.057871	0.102946	0.070073	0.097337	0.052122	0.081447	0.042894	0.047530	0.037468	0.085666	0.000000	0.055378	0.000000	0.085666	0.016445	0.000000
Ld-CL	0.008734	0.016253	0.010783	0.015316	0.007894	0.012573	0.006771	0.007808	0.006252	0.013494	0.000000	0.008586	0.000000	0.013494	0.003173	0.000000
Ld-CS	0.019520	0.035052	0.023721	0.033133	0.017586	0.027605	0.014608	0.016288	0.012872	0.029154	0.000000	0.018797	0.000000	0.029154	0.005802	0.000000
Ld-TL	0.010846	0.019872	0.013259	0.018826	0.009670	0.015520	0.008273	0.009070	0.007083	0.016498	0.000000	0.010529	0.000000	0.016498	0.003014	0.000000
Ld-TS	0.030814	0.054350	0.037097	0.051584	0.027854	0.043313	0.022753	0.025073	0.019735	0.045386	0.000000	0.029391	0.000000	0.045386	0.008515	0.000000
Ld-HTL	0.001517	0.002815	0.001872	0.002653	0.001349	0.002179	0.001168	0.001301	0.001024	0.002329	0.000000	0.001486	0.000000	0.002329	0.000464	0.000000
Ld-HTS	0.006006	0.011287	0.007435	0.010510	0.005295	0.008627	0.004618	0.005119	0.004009	0.009253	0.000000	0.005893	0.000000	0.009253	0.001750	0.000000
Ld-LL	0.000220	0.000416	0.000275	0.000391	0.000199	0.000319	0.000170	0.000204	0.000165	0.000342	0.000000	0.000217	0.000000	0.000342	0.000091	0.000000
Ld-LS	0.001213	0.002273	0.001511	0.002061	0.001083	0.001711	0.000926	0.001091	0.000885	0.001854	0.000000	0.001196	0.000000	0.001854	0.000469	0.000000
Ld-OL	0.004087	0.007676	0.005024	0.007215	0.003637	0.005912	0.003181	0.003478	0.002708	0.006347	0.000000	0.004029	0.000000	0.006347	0.001140	0.000000
Ld-OS	0.003772	0.006597	0.004597	0.006194	0.003562	0.005248	0.002776	0.003481	0.002921	0.005532	0.000000	0.003626	0.000000	0.005532	0.001810	0.000000
Ld-LSO	0.002695	0.004859	0.003260	0.004598	0.002383	0.003823	0.002013	0.002125	0.001627	0.004026	0.000000	0.002586	0.000000	0.004026	0.000575	0.000000
Lb-BL	0.014187	0.017035	0.015556	0.014320	0.012907	0.015091	0.048699	0.009346	0.008101	0.015647	0.000000	0.012037	0.000000	0.015647	0.004210	0.000000
Lb-BS	0.068153	0.084529	0.079246	0.070044	0.063681	0.074935	0.134400	0.049089	0.043314	0.077428	0.000000	0.059139	0.000000	0.077428	0.025989	0.000000
Lb-CL	0.006357	0.006987	0.006738	0.006292	0.006024	0.006765	0.026846	0.004131	0.003634	0.006706	0.000000	0.005097	0.000000	0.006706	0.002032	0.000000
Lb-CS	0.028714	0.035511	0.031488	0.030384	0.026347	0.031303	0.080967	0.019850	0.017205	0.032553	0.000000	0.024297	0.000000	0.032553	0.009496	0.000000
Lb-TL	0.007583	0.010094	0.008374	0.009256	0.007069	0.008945	0.019155	0.005506	0.004690	0.009174	0.000000	0.006486	0.000000	0.009174	0.002516	0.000000



	HT-L	HT-S	Lo-L	Lo-S	O-L	O-S	COM	FA1	FA2	FA3	FA4	FA5	FA6	FA7	FA8	FA9
	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214
Lb-TS	0.055731	0.071449	0.068177	0.063513	0.051322	0.062923	0.114926	0.039702	0.034123	0.064698	0.000000	0.046487	0.000000	0.064698	0.019327	0.000000
Lb-HTL	0.002945	0.000983	0.000933	0.000930	0.000849	0.001037	0.000625	0.000573	0.000495	0.000976	0.000000	0.000763	0.000000	0.000976	0.000245	0.000000
Lb-HTS	0.033150	0.042406	0.039652	0.034681	0.029570	0.035126	0.086697	0.022537	0.019478	0.037058	0.000000	0.027336	0.000000	0.037058	0.010701	0.000000
Lb-LL	0.000295	0.000325	0.006170	0.000298	0.000281	0.000316	0.001310	0.000216	0.000187	0.000350	0.000000	0.000234	0.000000	0.000350	0.000107	0.000000
Lb-LS	0.011546	0.013015	0.012099	0.014153	0.011042	0.012877	0.041272	0.007398	0.006296	0.012567	0.000000	0.009166	0.000000	0.012567	0.003185	0.000000
Lb-OL	0.002793	0.002644	0.002632	0.002342	0.003052	0.002366	0.027101	0.001385	0.001184	0.002535	0.000000	0.002019	0.000000	0.002535	0.000449	0.000000
Lb-OS	0.007110	0.008761	0.007868	0.007548	0.006737	0.009114	0.016197	0.005359	0.004745	0.008211	0.000000	0.006075	0.000000	0.008211	0.003034	0.000000
Lb-HRD	0.081999	0.123818	0.100453	0.113924	0.078240	0.104327	0.060356	0.070065	0.060510	0.108198	0.000000	0.074853	0.000000	0.108198	0.038983	0.000000
K-BL	0.025756	0.037710	0.030125	0.032567	0.023546	0.031339	0.017816	0.020085	0.017002	0.033133	0.000000	0.050582	0.000000	0.033133	0.009449	0.000000
K-BS	0.047642	0.063077	0.059970	0.047638	0.044740	0.054037	0.029384	0.037118	0.033272	0.056288	0.000000	0.065996	0.000000	0.056288	0.021493	0.000000
K-CL	0.011287	0.015441	0.013091	0.014837	0.011475	0.014804	0.007708	0.009374	0.008145	0.014338	0.000000	0.019951	0.000000	0.014338	0.005327	0.000000
K-CS	0.009680	0.013814	0.011679	0.011840	0.009591	0.011869	0.006437	0.009180	0.008412	0.012288	0.000000	0.014437	0.000000	0.012288	0.006647	0.000000
K-TL	0.005397	0.007816	0.006175	0.007118	0.005301	0.006838	0.003775	0.004585	0.003970	0.007038	0.000000	0.004694	0.000000	0.007038	0.002586	0.000000
K-TS	0.019453	0.027027	0.030678	0.024118	0.018235	0.022921	0.015909	0.016142	0.014279	0.023697	0.000000	0.016271	0.000000	0.023697	0.009984	0.000000
K-HTL	0.001154	0.001449	0.001317	0.001361	0.001213	0.001471	0.000761	0.000931	0.000829	0.001379	0.000000	0.000998	0.000000	0.001379	0.000566	0.000000
K-HTS	0.010982	0.013397	0.020136	0.011517	0.009959	0.011934	0.009202	0.007784	0.006867	0.011967	0.000000	0.008429	0.000000	0.011967	0.004374	0.000000
K-LL	0.000422	0.000487	0.000482	0.000446	0.000445	0.000524	0.000265	0.000332	0.000301	0.000478	0.000000	0.000357	0.000000	0.000478	0.000213	0.000000
K-LS	0.003344	0.003663	0.003603	0.003573	0.003540	0.004138	0.002119	0.002364	0.002089	0.003677	0.000000	0.002711	0.000000	0.003677	0.001294	0.000000
K-OL	0.007110	0.010533	0.008016	0.009705	0.006432	0.008710	0.005661	0.005516	0.004596	0.009257	0.000000	0.018104	0.000000	0.009257	0.002467	0.000000
K-OS	0.005612	0.006806	0.006419	0.006035	0.005944	0.006734	0.003678	0.005016	0.004690	0.006494	0.000000	0.006256	0.000000	0.006494	0.003810	0.000000
B-L	0.086896	0.120803	0.095221	0.109447	0.074037	0.102797	0.095276	0.082676	0.098717	0.155477	0.000000	0.294842	0.000000	0.155477	0.023335	0.000000
B-S	0.217305	0.278751	0.235720	0.240262	0.194056	0.242014	0.222787	0.238061	0.200661	0.443464	0.000000	0.428171	0.000000	0.443464	0.070633	0.000000
C-L	0.034017	0.044007	0.035513	0.041369	0.030992	0.039993	0.044036	0.038210	0.059587	0.071283	0.000000	0.090895	0.000000	0.071283	0.011252	0.000000
C-S	0.088114	0.103320	0.081765	0.091575	0.077971	0.091081	0.112805	0.130961	0.104146	0.258665	0.000000	0.107358	0.000000	0.258665	0.026868	0.000000
T-L	0.029471	0.039805	0.029765	0.036867	0.026165	0.034239	0.032510	0.036791	0.046331	0.071574	0.000000	0.050093	0.000000	0.071574	0.008440	0.000000
T-S	0.153507	0.194075	0.168742	0.175755	0.137802	0.168836	0.175406	0.190425	0.118029	0.363134	0.000000	0.156178	0.000000	0.363134	0.049648	0.000000
HT-L	1.008090	0.006440	0.005687	0.006076	0.005059	0.006362	0.003259	0.007973	0.009512	0.015974	0.000000	0.034253	0.000000	0.015974	0.001452	0.000000
HT-S	0.073974	1.086866	0.082940	0.074154	0.064937	0.074977	0.111093	0.092348	0.060158	0.178104	0.000000	0.075138	0.000000	0.178104	0.022448	0.000000
Lo-L	0.001781	0.001471	0.007081	0.001306	0.001572	0.001522	0.001920	0.003887	0.002768	0.008101	0.000000	0.001423	0.000000	0.008101	0.000452	0.000000
Lo-S	0.033121	0.034674	0.029482	0.033684	0.030562	0.033580	0.052525	0.048983	0.023186	0.097370	0.000000	0.025891	0.000000	0.097370	0.009542	0.000000
O-L	0.018020	0.023660	0.019007	0.022006	0.015800	0.020358	0.037370	0.016344	0.016299	0.030951	0.000000	0.082181	0.000000	0.030951	0.004438	0.000000
O-S	0.040269	0.036626	0.030309	0.032125	0.035393	0.036811	0.030615	0.081998	0.052801	0.167391	0.000000	0.058519	0.000000	0.167391	0.012392	0.000000
COM	0.073867	0.059419	0.062743	0.052981	0.057893	0.050706	0.029019	0.030119	0.025767	0.057827	0.000000	0.046504	0.000000	0.057827	0.007534	0.000000
FA1	0.279603	0.078822	0.047473	0.054429	0.215488	0.118340	0.052101	1.052720	0.050358	2.327520	0.000000	0.111850	0.000000	2.327520	0.013612	0.000000
FA2	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FA3	0.125561	0.035397	0.021319	0.024443	0.096770	0.053143	0.023397	0.023675	0.022614	1.045221	0.000000	0.050229	0.000000	0.045221	0.006113	0.000000
FA4	0.241207	0.097627	0.100305	0.156623	0.124838	0.135446	0.059990	0.063514	0.056158	0.122030	1.000000	0.108185	0.000000	0.122030	0.015817	0.000000
FA5	0.041126	0.028154	0.045390	0.029834	0.023017	0.038499	0.014565	0.015798	0.013531	0.030406	0.000000	1.025044	0.000000	0.030406	0.003891	0.000000
FA6	0.021091	0.021058	0.018663	0.030094	0.014451	0.023093	0.013608	0.014176	0.012377	0.026994	0.000000	0.025276	1.000000	0.026994	0.003728	0.000000
FA7	0.125561	0.035397	0.021319	0.024443	0.096770	0.053143	0.023397	0.023675	0.022614	1.045221	0.000000	0.050229	0.000000	1.045221	0.006113	0.000000
FA8	0.108647	0.208054	0.148406	0.158460	0.306419	0.122177	0.102140	0.654142	0.740323	0.198083	0.000000	0.164064	0.000000	0.198083	1.025882	0.000000
FA9	0.007117	0.005725	0.006045	0.005104	0.005578	0.004885	0.099138	0.002902	0.002482	0.005571	0.000000	0.004480	0.000000	0.005571	0.000726	1.000000

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VITA

Jaysingh Sah

Candidate for the Degree of

Doctor of Philosophy

**Thesis: ANALYSIS OF INCOME DISTRIBUTION BY CASTE AND FARM SIZE FOR A PANCHAYAT (VILLAGE SYSTEM) IN THE TARAI REGION OF NEPAL BY MEANS OF A SOCIAL ACCOUNTING MATRIX**

**Major Field: Agricultural Economics**

**Biographical:**

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**Education:** Graduated from Shri 3 Chandra High School Kalaiya in 1971; received a Bachelor of Science Degree in Agriculture from Punjab Agricultural University Ludhiana (India) in June, 1976; received a Master of Science Degree from Tamil Nadu Agricultural University, Coimbatore (India) in Agricultural Economics in September, 1984; completed requirements for the Doctor of Philosophy degree at Oklahoma State University in May, 1991.

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